REVISIONS					
ZONE	LTR	DESCRIPTION	CHG. NO.	DATE	APPROVED
	AU	REVISED PER TDRR 32030		29 NOV 66	WA RLW
	AV	REVISED PER TDRR 32086		10 DEC 66	KEF JAC
	AW	REVISION STATUS CHANGED		14 DEC 66	EJB RLW
	AY	REVISED PER TDRR 32204		14 DEC 66	EJB RLW
	AZ	REVISED PER TDRR 32241		14 DEC 66	EJB RLW
	BA	REVISED PER TDRR 32393		12 JAN 67	DR NW

(M)

ITEM NO.	DESCRIPTION	END ITEM	R.I.B. NO. (REF)	AUTHORIZATION ECP NO. OR S.O.W.	P/N MOD. (REF)	RFK NO.	NEW P/N (REF)	S/N
47.0	REPLACING GIMBAL SERVO AMPLIFIER WITH IMPROVED MODULE			ECP 461				
47.1		GIMBAL SERVO AMPLIFIER ASSEMBLY	0102665	ECP 461	2007114-011	8102699	2007114-021	MODULE SPARES, G&N 203, 204, 603, 604, 605 AND SPARES
47.2		POWER AND SERVO ASSEMBLY, C/M	0102666	ECP 461	2007200-051	8102696	2007200-081	G&N 203, 204, AND SPARE NO. 1
					2007200-061		2007200-071	
47.3		POWER AND SERVO ASSEMBLY, LEM	0102666	ECP 461	6007200-041	8102696	6007200-051	G&N 603, 604, 605, SPARE NO. 1 & SPARE NO. 2
47.4		POWER, SERVO & THERMOCOUPLE ASSEMBLY, C/M	0102666	ECP 461	2010743-021	8102707	2010743-031	G&N 202
47.5		POWER, SERVO & THERMOCOUPLE ASSEMBLY, LEM	0102666	ECP 461	6010655-011	8102707	6010655-021	G&N 602
48.0	IMPROVMENT FOR CDU CONNECTOR MATING	COUPLING DISPLAY UNIT	0102658	ECP 429	1015500-041	8102686	1015500-071	G&N 12
					1015500-051		1015500-081	121, 122, 123
.0	ADDITION OF EJECTABLE DUST COVERS		0102670			8102692		
.1		APTPS	0102670	426	-	8102692	1021373-031	12
.2		APTPS	0102670	427	-	8102692	1021373-041	121
.0	RELAY REPLACEMENT	CDU RESOLVER LOADS ASS'Y	0102661	ECP446	1007510-021	8102689	1007510-031	
.1	TRAY 6 MODULE REPLACEMENT	CDU AND POWER SUPPLY ELECT. ASS'Y	0102661	ECP446	1007576-021	8102688	1007576-031	
.2	TRAY 6 REPLACEMENT	PSA	0102661	ECP446	1007570-021	8102688	1007570-031	
.3	REPLACE RELAY AND DIODE MODULE	CONTROL ELEC ASS'Y	0102660	ECP446	1015064-021	8102690	1015064-031	

1021200

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
2 PLACE DECIMALS ± 3 PLACE DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING
MATERIAL
APPROVAL

AC ELECTRONICS DIVISION
GENERAL MOTORS CORP. MILWAUKEE WIS.
DRAWN ORZEL DATE 26 SEP 65
CHECKED C. WILSON
APPROVAL E. AUSTIN
CONTRACT NAS 9-497
NASA APPROVAL A.C. METZGER
MIT APPROVAL W KUPFER

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

MASTER RETROFIT KIT LIST
APOLLO G&N
(AC ELECTRONICS)

SIZE D
CODE IDENT NO. 99974
1021200
SCALE
SHEET 6 OF 6

MIL-10820 D

4 3 2 1

NOTICE – WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

(r)

REVISIONS		16921				
SYM	ZONE	DESCRIPTION	DR	CHK	DATE	APPROVED
A		REVISED PER TDRR 20216		VV	6/28/65	WK
B		REVISED PER TDRR 21861		VV	30 Aug 65	WK
C		REVISED PER TDRR 23223		VV	15 Oct 65	WK

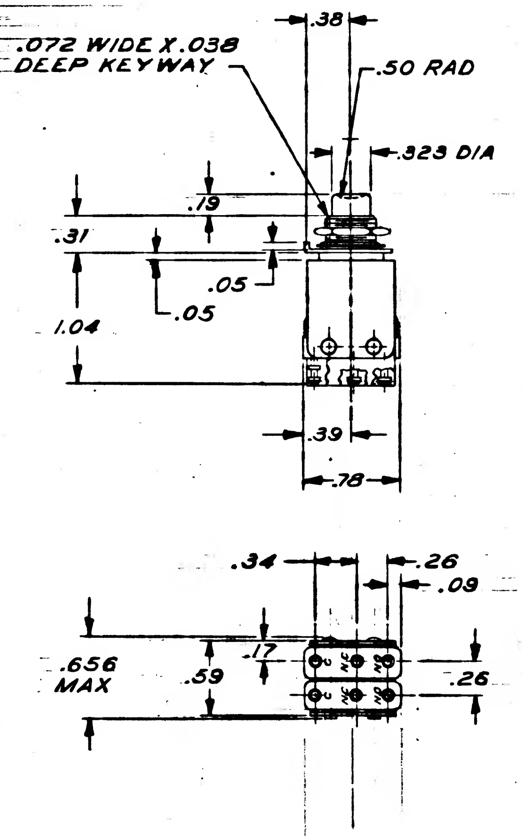
D

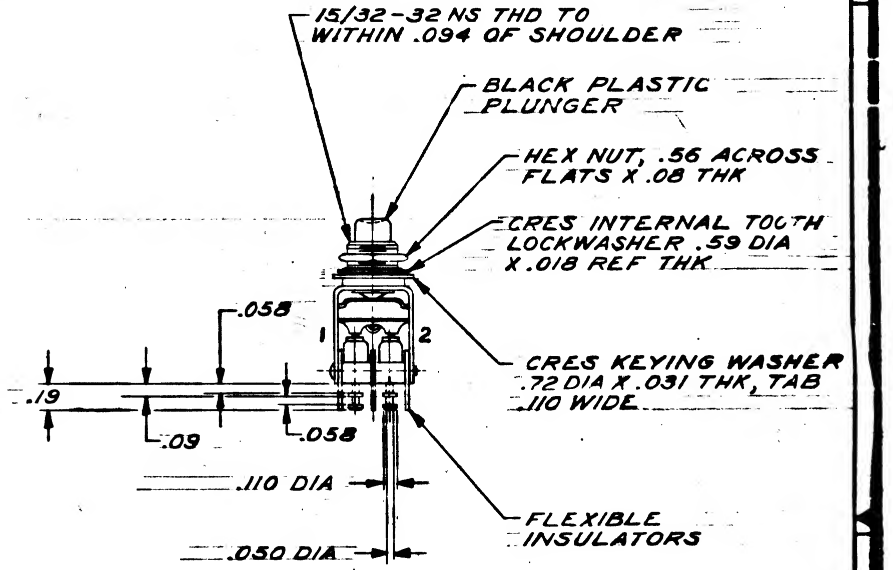
REQUIREMENTS:

1. GENERAL:
   - A. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327.
   - B. SWITCHES SHALL BE CAPABLE OF MEETING THE REQUIREMENTS OF MIL-S-6743, EXCEPT AS, AND IN ADDITION TO THE REQUIREMENTS SPECIFIED BELOW.
   - C. SUPPLIERS SHALL CONFORM TO THE QUALITY ASSURANCE PROVISIONS CONTAINED IN MIL-Q-9858.
   - D. UNITS SHALL BE CAPABLE OF MEETING THE QUALIFICATION REQUIREMENTS OF ND 1002055.
   - E. MARKING: UNITS SHALL BE PERMANENTLY AND LEGIBLY MARKED, PER MIL-STD-130, WITH THE TERMINAL IDENTIFICATION AND SWITCH NUMBERS (ON THE END OF EACH SWITCH) AS SHOWN. PACKAGES SHALL BE MARKED, PER MIL-STD-129, WITH THE MANUFACTURER'S NAME AND/OR SYMBOL, DATE OF MANUFACTURE OR DATE CODE AND NASA PART NUMBER.
   - F. BASIC SWITCH SHALL BE PER MS 25085-1.
2. INSPECTION AND ACCEPTANCE:
   - A. MECHANICAL REQUIREMENTS:
     1. ACTUATING FORCE: 40 OUNCES MAXIMUM
     2. TOTAL TRAVEL: .140 MAXIMUM, .080 MINIMUM
     3. CONTACT ARRANGEMENT: 2 SPDT
     4. DIMENSIONS
   - B. ELECTRICAL CHARACTERISTICS:
     1. CONTACT VOLTAGE DROP: ONE MILLIVOLT MAX AT 100 MILLIAMPERES WHEN 2 TO 4 VDC IS APPLIED THRU A SUITABLE DROPPING RESISTOR.
     2. DIELECTRIC WITHSTANDING VOLTAGE: 1000 VRMS, 60 CPS

C

3. DESIGN REQUIREMENTS:
   - A. OPERATING LIFE (MIN): 100,000 CYCLES OF MECHANICAL OPERATION AND 25,000 CYCLES OF OPERATION WITH A RESISTIVE LOAD.
   - B. CONSTRUCTION: BASIC SUBMINIATURE SNAP-ACTION SWITCH PERMANENTLY MOUNTED IN A PUSH BUTTON HOLDER. HOLDER MATERIAL, CORROSION-RESISTANT STEEL. TERMINAL MATERIAL, BRASS SUITABLY PLATED FOR SOLDERING. CONTACT MATERIAL, SILVER.
   - C. TERMINAL STRENGTH: CAPABLE OF WITHSTANDING A 5 LB MIN AXIAL PULL.
   - D. STRENGTH OF ACTUATOR: 25 POUNDS MIN STEADY LOAD.
   - E. CONTACT RATINGS:
     1. 28 VDC
        RESISTIVE LOAD: 5 AMPERES
        INDUCTIVE LOAD: 3 AMPERES
     2. 125 VRMS
        RESISTIVE LOAD: 5 AMPERES
     3. MAXIMUM INRUSH: 24 AMPERES





15/32-32 NS THD TO WITHIN .094 OF SHOULDER
BLACK PLASTIC PLUNGER
HEX NUT, .56 ACROSS FLATS X .08 THK
CRES INTERNAL TOOTH LOCKWASHER .59 DIA X .018 REF THK
.058
1
2
CRES KEYING WASHER .72 DIA X .031 THK, TAB .110 WIDE
.19
.09
.058
.110 DIA
FLEXIBLE INSULATORS
.050 DIA

B

PROCURE ONLY FROM APPROVED SOURCES LISTED ON ND 1002034 FOR THIS DRAWING.

A

MASTER

QTY REQD	PART OR IDENTIFYING NO.	MATERIAL OR NOTES	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
CAPACITOR VALUES ARE IN µf
RESISTOR VALUES ARE IN OHMS
TOLERANCES ON
FRACTIONS ± DECIMALS .XX ± .015 .XXX ± .005 ANGLES ±
DO NOT SCALE THIS DRAWING

MATERIAL
SEE REQUIREMENTS

MIT
INSTRUMENTATION LAB
CAMBRIDGE, MASS.

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

DRAWN	R.J.J.	12/16/64
CHECKED		9/9/65
APPROVED		9/9/65
APPROVED	J. M. Watson	2/26/65
APPROVED MIT	W. Kupfer	25 Oct 65
APPROVED MSC		3/4/66
		DATE

SWITCH, PUSHBUTTON
MOMENTARY

SPECIFICATION CONTROL DRAWING

CODE IDENT NO.	SIZE	DRAWING NO.
80230	C	1021575
SCALE NONE		SHEET 1 OF 1

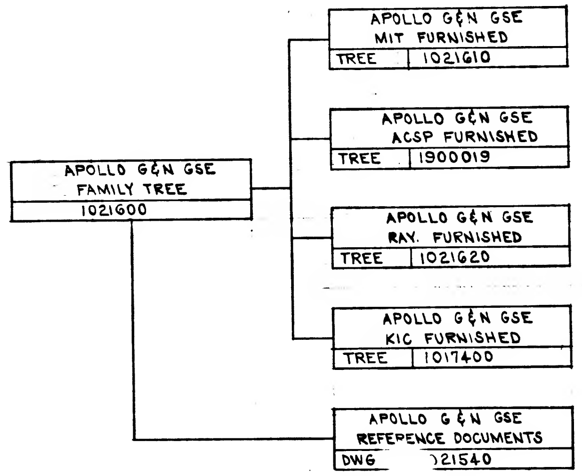
4 3 2 1

VAITKUS

NOTICE WHEN GOVERNMENT DRAWINGS SPECIFICATIONS OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REVISIONS

SYM	ZONE	DESCRIPTION	DR	CHK	DATE	APPROVED
–		RELEASED TDRR 14174	F.P.G.		11-10-64	WK



NOTES:

1. SEE DWG 1900030 FOR LISTING OF ALL GSE END ITEMS AND THEIR DEPLOYMENT WITHIN TEST STATIONS.

MASTER

QTY REQD	PART OR IDENTIFYING NO.	MATERIAL OR NOTES	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

FINAL	1000000
NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
CAPACITOR VALUES ARE IN µf
RESISTOR VALUES ARE IN OHMS
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING
MATERIAL

MIT
INSTRUMENTATION LAB
CAMBRIDGE, MASS.

		DATE
DRAWN	F.P. Grasso	11-9-64
CHECKED		4-9-64
APPROVED		
APPROVED	C. Sparling	11-9/64
APPROVED MIT	W Kupfer	12/4/64
APPROVED MSC	W J Rhine	11-12-64

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

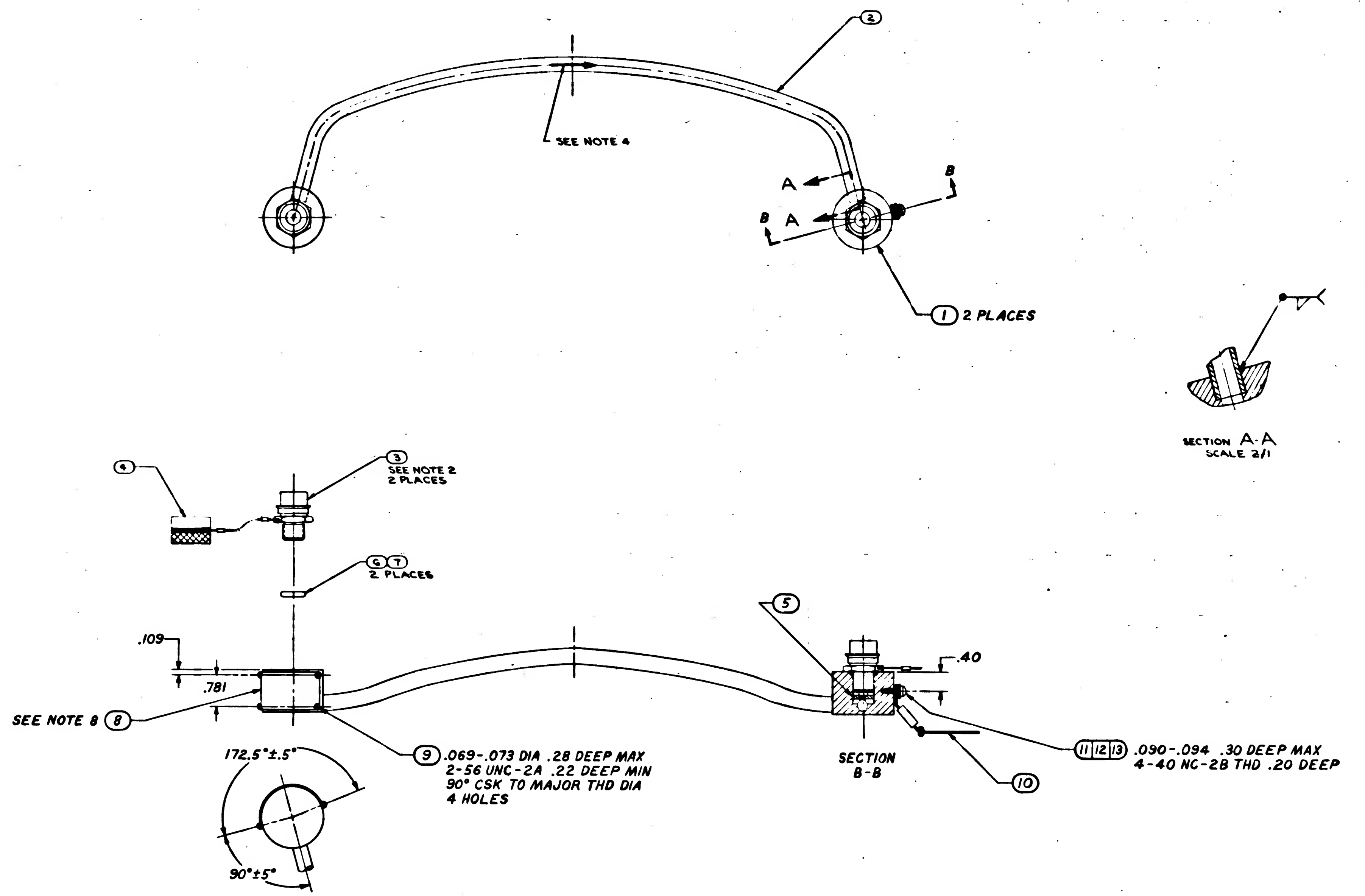
APOLLO G&N GSE
FAMILY TREE

CODE IDENT NO.	SIZE	DRAWING NO.
	D	1021600

SCALE ——
SHEET 1 OF 1

SYM	ZONE	DESCRIPTION	DR	CHK	DATE	APPROVED
A		REVISED PER TDRR 28872	J.		26-APR-68	

REVISIONS TDRR 24869



NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH MIL-D-70327.
2. TORQUE REQUIREMENT: 70 IN. LBS ±7%.
3. NO PRESSURE DECAY SHALL BE EVIDENCED WHEN THE UNIT IS SUBJECTED TO AN INTERNAL PRESSURE OF 100 ±10 PSIG FOR ONE HOUR USING DRY AIR OR INERT GAS.
4. IDENTIFY FLOW DIRECTION WITH TWO ARROWS, 180° APART (ONE INCH LONG) ON EXTERNAL SURFACE OF PART.
5. IDENTIFY USING DRAWING NUMBER PER MIL-STD-130 (ES267).
6. ENTIRE I. D. OF TUBE AND BLOCK WELDMENT (ASSY ITEMS 1 AND 2) SHALL PERMIT PASSAGE OF A .187 DIA SST BALL.
7. WELD PER MIL-W-8611. POLISH ITEM ② TO FIT IF REQUIRED.
8. NAMEPLATE TO BE FORMED TO CONTOUR OF BLOCK AT TIME OF INSTALLATION.
9. APPLY FIND NO. 14 TO THE THREADS OF FIND NO. 9.

DUPLICATE MASTER

QTY REQD	PART OR IDENTIFYING NO.	MATERIAL OR NOTES	NOMENCLATURE OR DESCRIPTION	FIND NO
A/R	MIL-S-22473 GRADE C		SEALING AND RETAINING COMPOUND (ES2544-3)	14
1	MS35337-21		WASHER, LOCK	13
1	AN960C4L		(897006-034) WASHER, FLAT	12
1	MS35216-13		SCREW, PAN HD	11
1	2901472-011		STREAMER	10
4	MS35216-2		SCREW, PAN HD	9
1	1004260-513		NAMEPLATE	8
A/R	MIL-L-4343A		LUBRICANT, DOW CORNING NO. 55	7
2	1000155-6		PACKING PREFORMED, 'O' RING	6
1	1015421		PLATE, ORIFICE	5
2	1001494		DUST COVER, QUICK DISCONNECT	4
2	1000185		COUPLING HALF, QUICK DISCONNECT	3
1	1021618		TUBE, JUMPER BY PASS	2
2	1021617		BLOCK, JUMPER BY PASS	1

LIST OF MATERIALS

NEXT ASSY	USED ON
1900030	

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
CAPACITOR VALUES ARE IN µf
RESISTOR VALUES ARE IN OHMS
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING
MATERIAL

MIT
INSTRUMENTATION LAB
CAMBRIDGE MASS

DRAWN	DTB	1/3/65
CHECKED		
APPROVED		
APPROVED		
APPROVED MIT		
APPROVED MSC		DATE

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

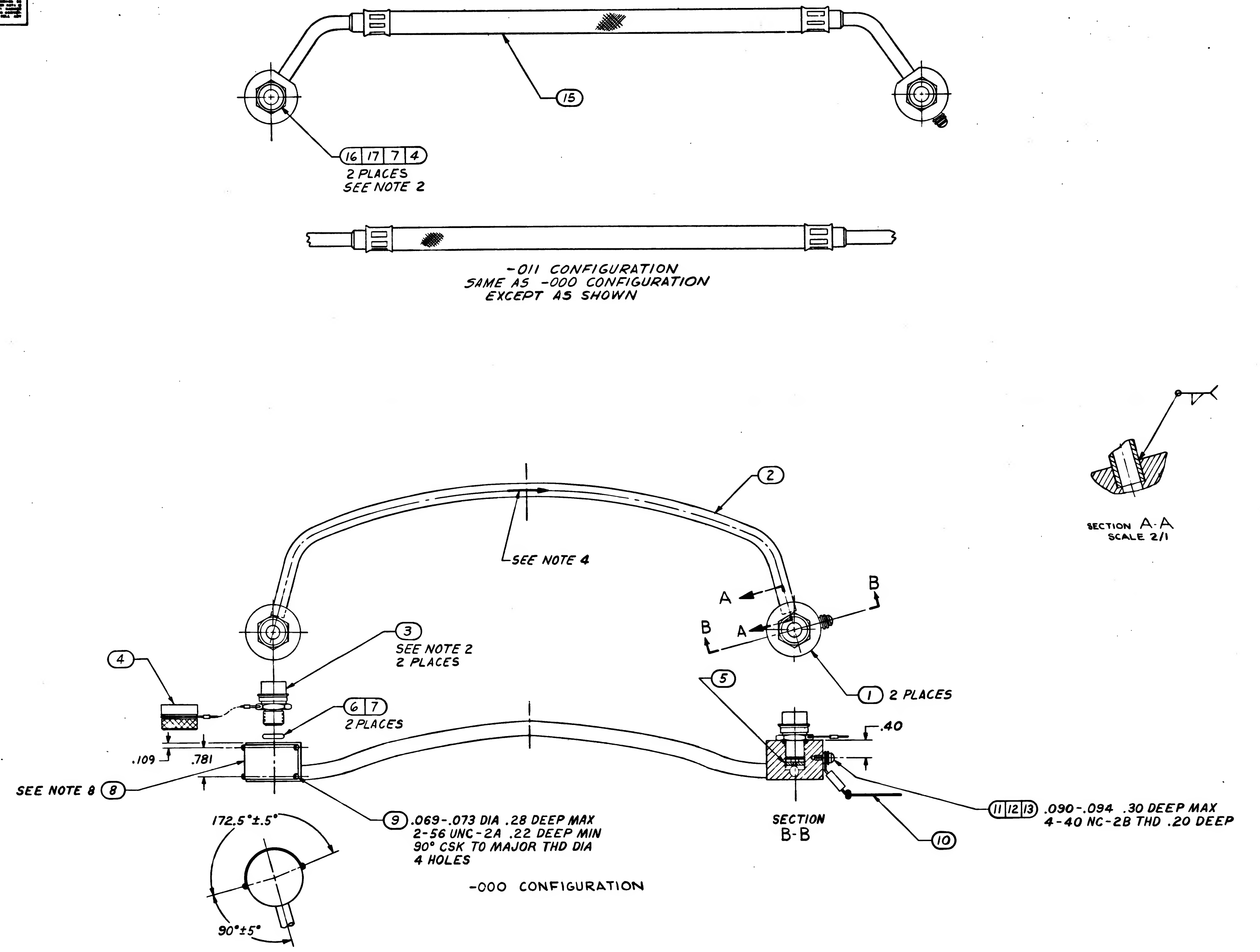
JUMPER BY-PASS ASSEMBLY
COOLANT-FLUID
BLOCK II

CODE IDENT NO. 80230
SIZE E
DRAWING NO. 1021616
SCALE 1/1
SHEET 1 OF 1

[illegible]

REVISIONS TDRR 24889

SYM	ZONE	DESCRIPTION	DR	CHK	DATE	APPROVED
A		REVISED PER TDRR 28972	B.		26-APR-68	
B		REVISED PER TDRR 38 6	N.G		22-5-	



NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH MIL-D-70327.
2. TORQUE REQUIREMENT: 70 IN. LBS ±7%.
3. NO PRESSURE DECAY SHALL BE EVIDENCED WHEN THE UNIT IS SUBJECTED TO AN INTERNAL PRESSURE OF 100 ±10 PSIG FOR ONE HOUR USING DRY AIR OR INERT GAS.
4. IDENTIFY FLOW DIRECTION WITH TWO ARROWS, 180° APART (ONE INCH LONG) ON EXTERNAL SURFACE OF PART. FOR -000 CONFIGURATION ONLY.
5. IDENTIFY USING DRAWING NUMBER PER MIL-STD-130 (ES267).
6. ENTIRE I. D. OF TUBE AND BLOCK WELDMENT (ASSY ITEMS 1 AND 2 OR 15) SHALL PERMIT PASSAGE OF A .187 DIA SST BALL.
7. WELD PER MIL-W-8611. POLISH ITEM 2 TO FIT IF REQUIRED.
8. NAMEPLATE TO BE FORMED TO CONTOUR OF BLOCK AT TIME OF INSTALLATION.
9. APPLY ITEM NO. 14 TO THE THREADS OF ITEM NO. 9.
10. METAL STAMP -011 TO RIGHT OF PART NUMBER ON -011 CONFIGURATION NAMEPLATE ONLY. CHARACTERS TO BE .09 HIGH.
11. 2 INCH MINIMUM BEND RADIUS FOR -011 CONFIGURATION ONLY.
12. VENDOR ITEM - SEE SOURCE CONTROL DRAWING.
13. CLEANLINESS REQUIREMENTS PER ND1002223.

NOTES (CONTINUED):

14. ASSEMBLY SHALL BE PACKED AND SHIPPED IN A MANNER THAT WILL:
    - A. PREVENT CONTAMINATION OF INTERNAL SURFACES.
    - B. PREVENT BENDING OF THE HOSE TO A RADIUS OF LESS THAN 6 INCHES (-011 CONFIGURATION ONLY)
    - C. PREVENT DAMAGE TO COUPLING HALF.

	-011 QTY REQD	-000 QTY REQD	PART OR IDENTIFYING NO.	MATERIAL OR NOTES	NOMENCLATURE OR DESCRIPTION	FIND NO.
	2	-	1897440-006		PACKING PREFORMED "O" RING	17
	2	-	1000135-001		COUPLING HALF, QUICK DISCONNECT	16
SEE NOTE 12	1	-	2901684		BY-PASS ASSY (INSEP. ASSY.)	15
	A/R	A/R	MIL-S-22473 GRADE C		SEALING AND RETAINING COMPOUND (ES2544-3)	14
	1	1	MS35337-21		WASHER, LOCK	13
	1	1	AN960C4L		(1897006-034) WASHER, FLAT	12
	1	1	MS35216-13		SCREW, PAN HD	11
	1	1	2901472-011		STREAMER	10
	4	4	MS35216-2		SCREW, PAN HD	9
SEE NOTE 10	1	1	1004260-513		NAMEPLATE	8
	A/R	A/R	MIL-L-4343A		LUBRICANT, DOW CORNING NO. 55	7
	-	2	1000155-6		PACKING, PREFORMED, "O" RING	6
	1	1	1015421		PLATE, ORIFICE	5
	2	2	1001494		DUST COVER, QUICK DISCONNECT	4
	-	2	1000135		COUPLING HALF, QUICK DISCONNECT	3
	-	1	1021618		TUBE, JUMPER BY PASS	2
	-	2	1021617		BLOCK, JUMPER BY PASS	1

LIST OF MATERIALS

DUPLICATE MASTER

NEXT ASSY	USED ON
1900030	

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
CAPACITOR VALUES ARE IN µf
RESISTOR VALUES ARE IN OHMS
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING
MATERIAL

MIT
INSTRUMENTATION LAB
CAMBRIDGE, MASS

DRAWN DTB 11/3/65
CHECKED 12/9/65
APPROVED 12/10/65
APPROVED 12/2/65
APPROVED MIT 12/14/65
APPROVED MSC
DATE

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

JUMPER BY-PASS ASSEMBLY
COOLANT FLUID
BLOCK II

CODE IDENT NO. 80230
SIZE E
DRAWING NO. 1021616
SCALE 1/1
SHEET 1 OF 1

1021616 B

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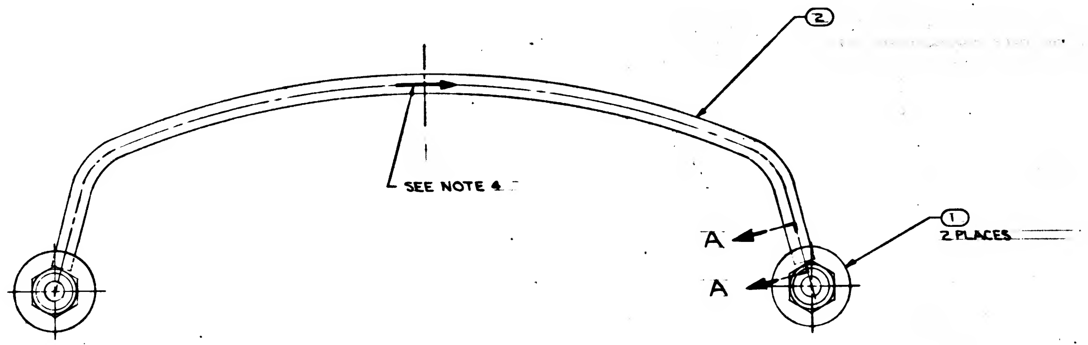
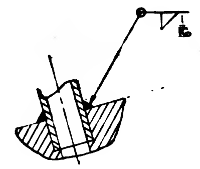
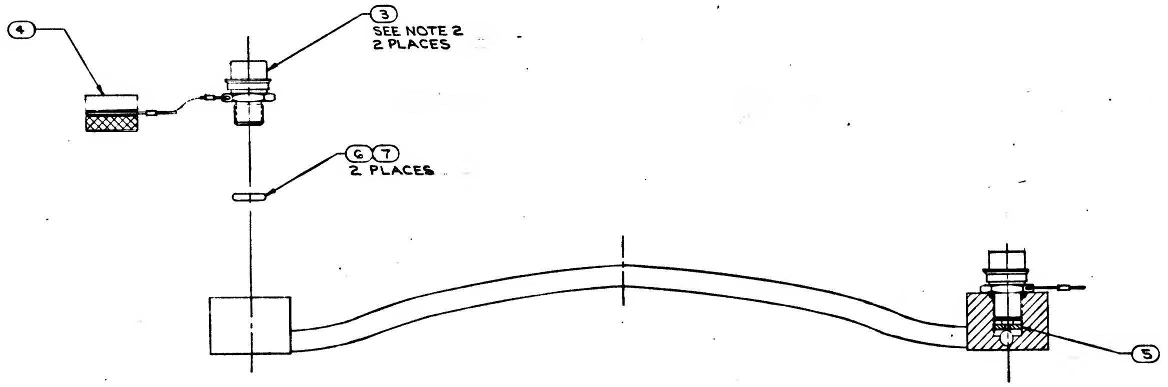
SYM	ZONE	DESCRIPTION	DR	CHK	DATE	APPROVED
REVISIONS TDRR 24883						





SECTION A-A
SCALE 2/1



NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH MIL-D-70327
2. TORQUE REQUIREMENT: 70 IN-LB ±7%
3. MAX ALLOWABLE LEAKAGE FOR THIS ASSEMBLY SHALL BE 5×10^{-6} STD CC/SEC OF HELIUM AT 77.5 PSIG
4. IDENTIFY FLOW DIRECTION WITH TWO ARROWS 180° APART (1 INCH LONG) ON EXTERNAL SURFACE OF PART
5. IDENTIFY USING DRAWING NO. AND MANUFACTURERS SYMBOL PER ND 1002019
6. PRESSURE DROP ACROSS ASSEMBLY (INCLUDING TWO FEMALE QUICK DISCONNECT COUPLING HALF) 0.70 ±.1 PSI AT A GLYCOL/WATER (62.5/37.5 PERCENT BY WEIGHT) FLOW RATE OF 0.06 GPM ±0.002 GPM AND TEMPERATURE OF 45°F ±1°F

1021616

QTY REQD	PART OR IDENTIFYING NO.	MATERIAL OR NOTES	NOMENCLATURE OR DESCRIPTION	FIND NO.
A/R	MIL-L-4343A		LUBRICANT, DOW CORNING NO. 55	7
2	1000159-6		PACKING PREFORMED, 'O' RING	6
1	1015421		PLATE, ORIFICE	5
2	1001494		DUST COVER, QUICK DISCONNECT	4
2	1000135		COUPLING HALF, QUICK DISCONNECT	3
1	1021618		TUBE, JUMPER BY PASS	2
2	1021617		BLOCK, JUMPER BY PASS	1

LIST OF MATERIALS

MASTER

NEXT ASSY	USED ON
1900030	

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
CAPACITOR VALUES ARE IN μf
RESISTOR VALUES ARE IN OHMS
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING

MATERIAL

MIT
INSTRUMENTATION LAB
CAMBRIDGE, MASS.

DRAWN DTB 11/3/65
CHECKED 11/8/65
APPROVED 12/6/65
APPROVED 6 Dec 65
APPROVED MIT W Kupfer 24 Dec 65
A. C. METZGER
APPROVED MSC
DATE

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

JUMPER BY-PASS ASSEMBLY
COOLANT FLUID
BLOCK II

CODE IDENT NO. 80230
SIZE E
DRAWING NO. 1021616
SCALE 1/1
SHEET 1 OF 1

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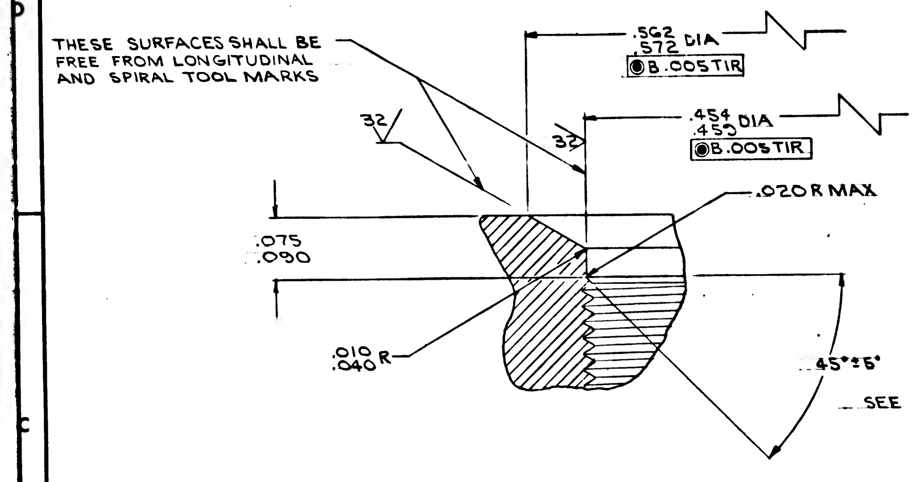
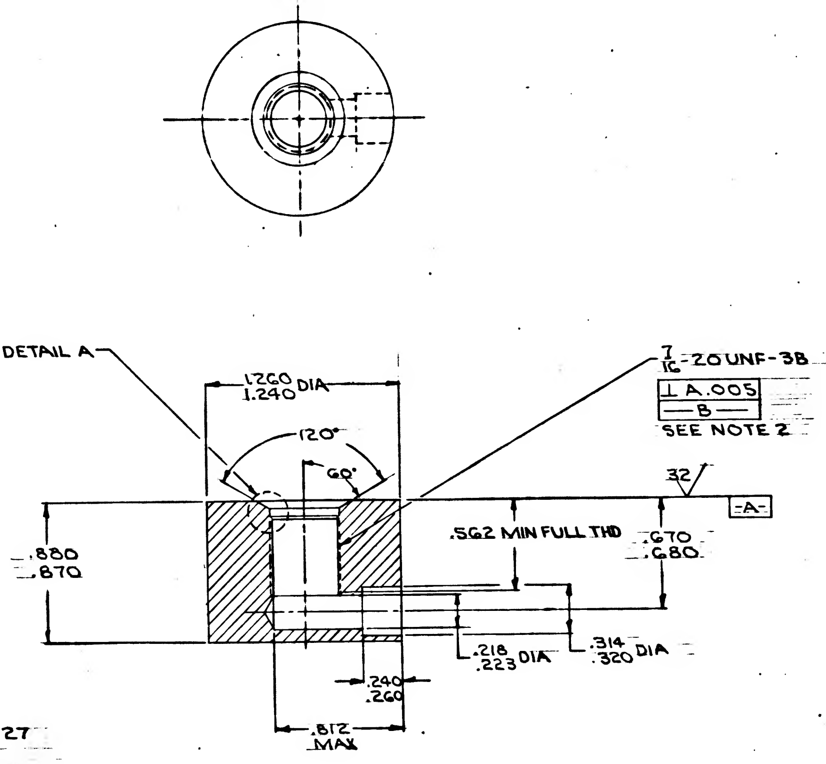
REVISIONS TDRR 24889

SYM	ZONE	DESCRIPTION	DR	CHK	DATE	APPROVED



DETAIL A
SCALE 8/1



NOTES:
1. INTERPRET DRAWING IN ACCORDANCE WITH MIL-D-70327
2. THREAD SPEC MIL-S-7742
3. BREAK SHARP EDGES .005/.015
4. ALL INSIDE CORNERS .010R MAX
5. 63√ UNLESS OTHERWISE SPECIFIED
6. IDENTIFY USING DRAWING NO., AND MANUFACTURERS SYMBOL PER ND1002019
7. PASSIVATE IN ACCORDANCE WITH MIL-F-14072 FIN E-300
8. HYDROSTATIC PRESSURE TEST AT 90 PSIG USING DISTILLED WATER

MASTER

QTY REQD	PART OR IDENTIFYING NO.	MATERIAL OR NOTES	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY	USED ON
1021616	

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
CAPACITOR VALUES ARE IN μf
RESISTOR VALUES ARE IN OHMS
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING

MATERIAL
CRES 303 PER
QQ-S-

MIT
INSTRUMENTATION LAB
CAMBRIDGE, MASS.

DRAWN	DTB	10/29/65
CHECKED		11/8/65
APPROVED	L. Fedimga	12/8/65
APPROVED		12/8/65
APPROVED MIT	W. Kupfer R. C. METZGER	12/8/65
APPROVED MSC		
		DATE

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

BLOCK, JUMPER BY-PASS
COOLANT FLUID
BLOCK II

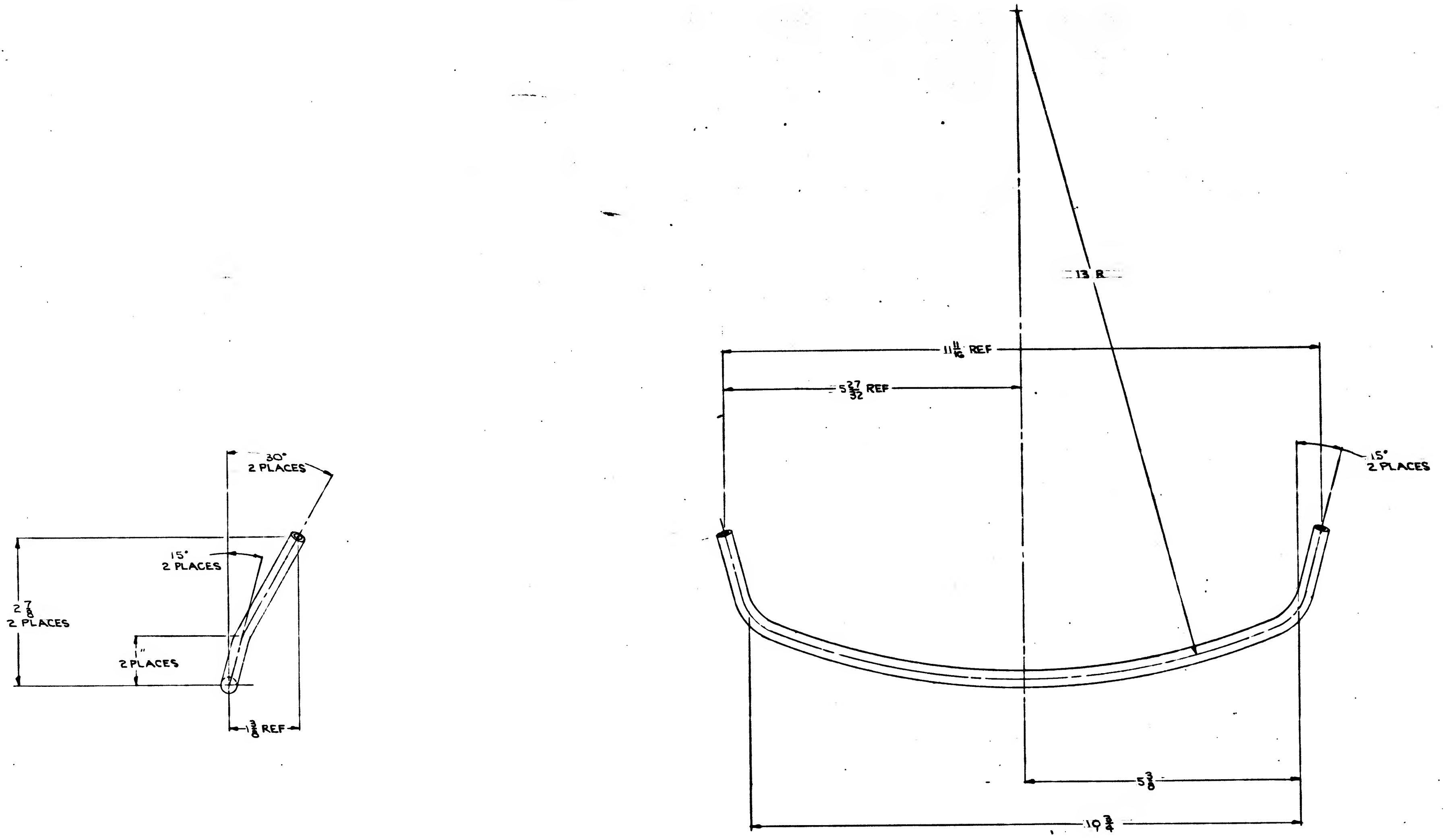
CODE IDENT NO.	SIZE	DRAWING NO.
80230	D	1021617
SCALE 2/1		SHEET 1 OF 1

1021617

NOTICE – WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS, OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REVISIONS TDRR 24889

SYM	ZONE	DESCRIPTION	DR	CHK	DATE	APPROVED



NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH MIL-D-70327
2. MATERIAL: STAINLESS STEEL TUBING $\frac{5}{16}$ OD .218 I.D.
3. ALL BEND RADII 1"
4. IDENTIFY USING DRAWING NO., AND MANUFACTURERS SYMBOL PER ND1002019

MASTER

QTY REQD	PART OR IDENTIFYING NO.	MATERIAL OR NOTES	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY	USED ON
1021616	

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
CAPACITOR VALUES ARE IN µf
RESISTOR VALUES ARE IN OHMS
TOLERANCES ON
FRACTIONS ± $\frac{1}{16}$ DECIMALS ± ——— ANGLES ± 2°
DO NOT SCALE THIS DRAWING

MATERIAL
SEE NOTE 2

MIT
INSTRUMENTATION LAB
CAMBRIDGE, MASS.

DRAWN DTB 11/1/65
CHECKED 12/8/65
APPROVED 12/8/65
APPROVED 12/8/65
APPROVED MIT 12/8/65
APPROVED MSC
DATE

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

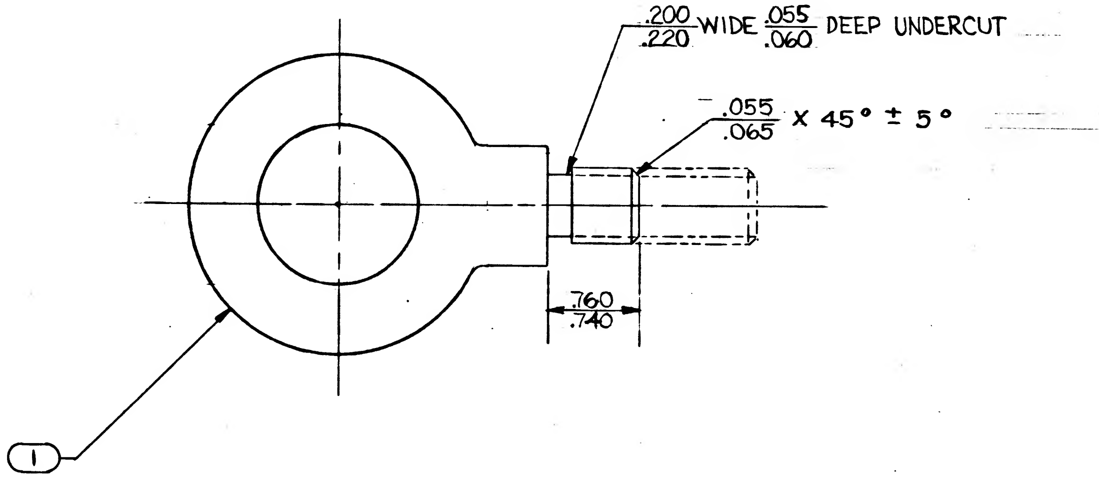
TUBE, JUMPER BY-PASS
COOLANT FLUID
BLOCK II

CODE IDENT NO 80230
SIZE E
DRAWING NO. 1021618
SCALE 1/1
SHEET 1 OF 1

1021618

1021626

REVISIONS				21995
ZONE	SYM	DESCRIPTION	DATE	APPROVAL



MASTER

QTY. REQD.	NOMENCLATURE OR DESCRIPTION	PART OR IDENTIFYING NO.	SPECIFICATION	MATERIAL OR NOTES	FIND NO.
1	BOLT, EYE	1006674-6			1

-011 LIST OF PARTS AND MATERIALS

NEXT ASSY	USED ON
1015462-011	1015462-011

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS DECIMALS ANGLES

DO NOT SCALE THIS DRAWING

MATERIAL:

MIT
INSTRUMENTATION LAB
CONTRACT
NAS 9-153

		DATE
APPROVED		3/5/65
CHECKED		3-5-65
DRAWN		2-1965

APPROVED FOR MSC

MIT/IL APPROVAL | DATE

BOLT, EYE MODIFIED

SCALE	UNIT WT.	CODE IDENT.
1/1		80230

MIT
INSTRUMENTATION
LABORATORY
CAMBRIDGE, MASS.

DWG. NO.

MANNED
SPACECRAFT CENTER
HOUSTON TEXAS

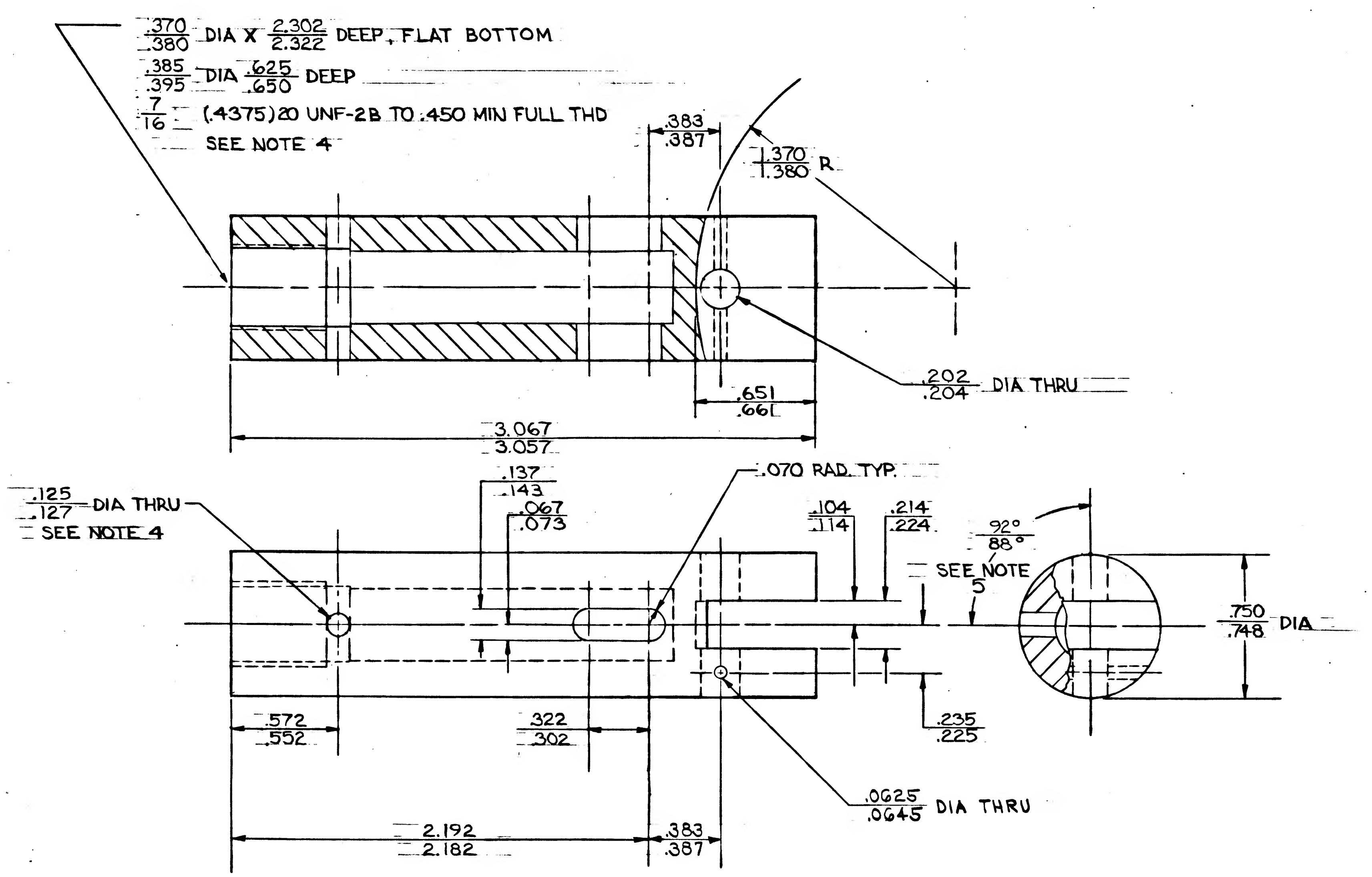
NASA DRAWING NO.
1021626

SHEET 1 OF 1

NOTICE – WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REVISIONS 21995

SYM	ZONE	DESCRIPTION	DR	CHK	DATE	APPROVED



NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH MIL-D-70327
2. $\overset{32}{\surd}$ ALL OVER UNLESS OTHERWISE SPECIFIED
3. BREAK SHARP EDGES $\frac{.005}{.015}$
4. DEBURR HOLE AND THREAD PRIOR TO HEAT TREAT
5. $\frac{.202}{.204}$ DIA HOLE TO BE PERPENDICULAR TO $\frac{.137}{.143}$ WIDE SLOT WITHIN ± 2°
6. MATERIAL: STEEL, STAINLESS PER QQ-S-763, CLASS 416
7. HEAT TREAT:
   - A. HEAT TO 1800°F FOR 30 MIN
   - B. OIL QUENCH
   - C. TEMPER AT 600°F FOR 60 MIN
   - D. AIR COOL
8. FINISH: PASSIVATE PER MIL-F-14072 E300

MASTER

QTY REQD	PART OR IDENTIFYING NO.	MATERIAL OR NOTES	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY	USED ON
1015462-011	1025462-011

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
CAPACITOR VALUES ARE IN μf
RESISTOR VALUES ARE IN OHMS
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING

MATERIAL
SEE NOTE 6

MIT
INSTRUMENTATION LAB
CAMBRIDGE, MASS.

DRAWN P. S. [illegible] 2-4-65
CHECKED [illegible] 3-5-65
APPROVED [illegible] 3/5/65
APPROVED
APPROVED MIT [illegible] 2 May 65
APPROVED MSC
DATE

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

PLUNGER

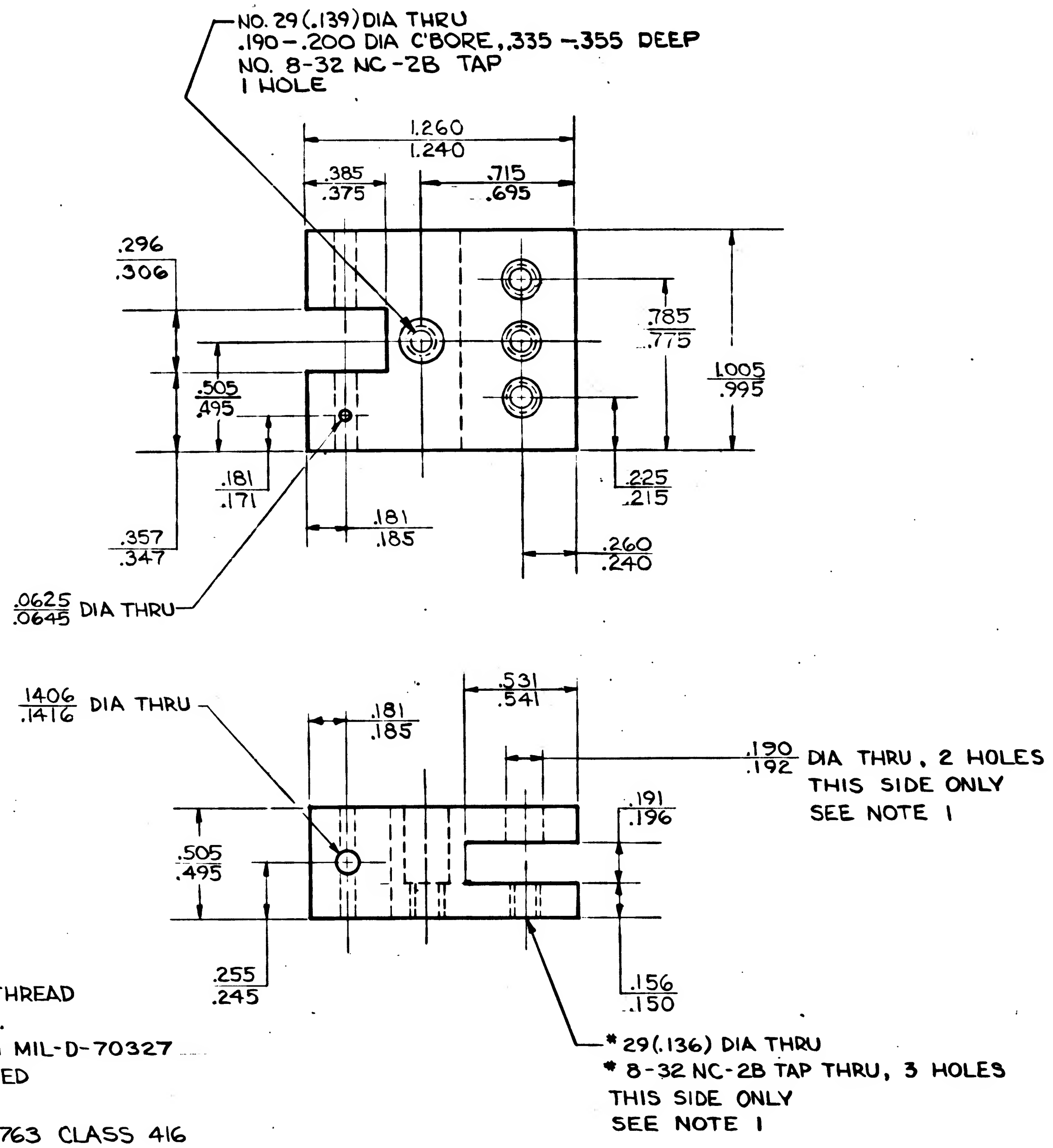
CODE IDENT NO. 80230
SIZE C
DRAWING NO. 1021627
SCALE 2/1
SHEET 1 OF 1

Ac

NOTICE - WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REVISIONS 21995

SYM	ZONE	DESCRIPTION	DR	CHK	DATE	APPROVED
A		REVISED PER TDRR 24180	Spicer	[illegible]	29NOV65	



1021628 A

NOTES:

1. $\frac{.190}{.192}$ DIA AND P.D. OF # 8-32 NC-2B THREAD TO BE CONCENTRIC WITHIN .003 T.I.R.
2. INTERPRET DRAWING IN ACCORDANCE WITH MIL-D-70327
3. $\sqrt{32}$ ALL OVER UNLESS OTHERWISE SPECIFIED
4. BREAK SHARP EDGES $\frac{.005}{.015}$
5. MATERIAL: STEEL, STAINLESS PER QQ-S-763 CLASS 416
6. HEAT TREAT:
   - A. HEAT TO 1800°F FOR 30 MIN
   - B. OIL QUENCH
   - C. TEMPER AT 600°F FOR 60 MIN
   - D. AIR COOL
7. FINISH: PASSIVATE PER MIL-F-14072, E300

QTY REQD	PART OR IDENTIFYING NO.	MATERIAL OR NOTES	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY	USED ON
1015462-011	1015462-011

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
CAPACITOR VALUES ARE IN μf
RESISTOR VALUES ARE IN OHMS
TOLERANCES ON
FRACTIONS ± DECIMALS ± .005 ANGLES ±
DO NOT SCALE THIS DRAWING

MATERIAL
SEE NOTE 6

MIT
INSTRUMENTATION LAB
CAMBRIDGE, MASS.

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

DRAWN	P.A. Guso	2-5-65
CHECKED	[illegible]	3-5-65
APPROVED	[illegible]	3/5/65
APPROVED		
APPROVED MIT	[illegible]	[illegible]
APPROVED MSC		DATE

LINK, CHAIN & CABLE

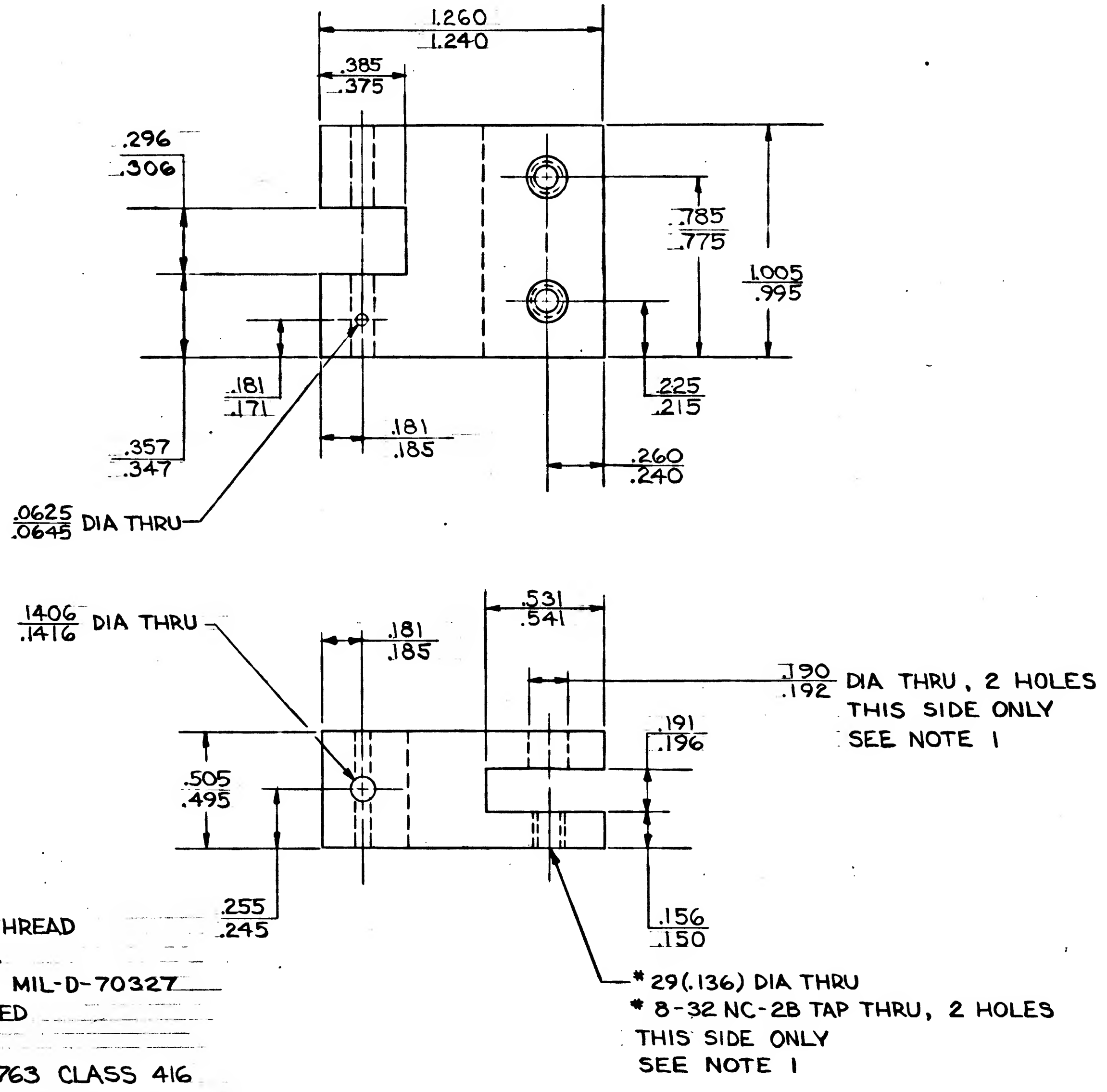
CODE IDENT NO.	SIZE	DRAWING NO.
80230	C	1021628

SCALE 2/1 SHEET 1 OF 1

NOTICE — WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

21995

REVISIONS						
SYM	ZONE	DESCRIPTION	DR	CHK	DATE	APPROVED



NOTES:

1. $\frac{.190}{.192}$ DIA AND P. D. OF # 8-32 NC-2B THREAD TO BE CONCENTRIC WITHIN .003 T. I. R.
2. INTERPRET DRAWING IN ACCORDANCE WITH MIL-D-70327
3. $^{32}\surd$ ALL OVER UNLESS OTHERWISE SPECIFIED
4. BREAK SHARP EDGES $\frac{.005}{.015}$
5. MATERIAL: STEEL, STAINLESS PER QQ-S-763 CLASS 416
6. HEAT TREAT:
   - A. HEAT TO 1800°F FOR 30 MIN
   - B. OIL QUENCH
   - C. TEMPER AT 600°F FOR 60 MIN
   - D. AIR COOL
7. FINISH: PASSIVATE PER MIL-F-14072, E300

MASTER

QTY REQD	PART OR IDENTIFYING NO.	MATERIAL OR NOTES	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

1015462-011	1015462-011
NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
CAPACITOR VALUES ARE IN μf
RESISTOR VALUES ARE IN OHMS
TOLERANCES ON
FRACTIONS ± DECIMALS ±.005 ANGLES ±
DO NOT SCALE THIS DRAWING

MATERIAL
SEE NOTE 6

MIT
INSTRUMENTATION LAB
CAMBRIDGE, MASS.

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

DRAWN	P.A.	2-5-65
CHECKED		3-5-65
APPROVED		3/5/65
APPROVED		
APPROVED MIT		
APPROVED MSC		DATE

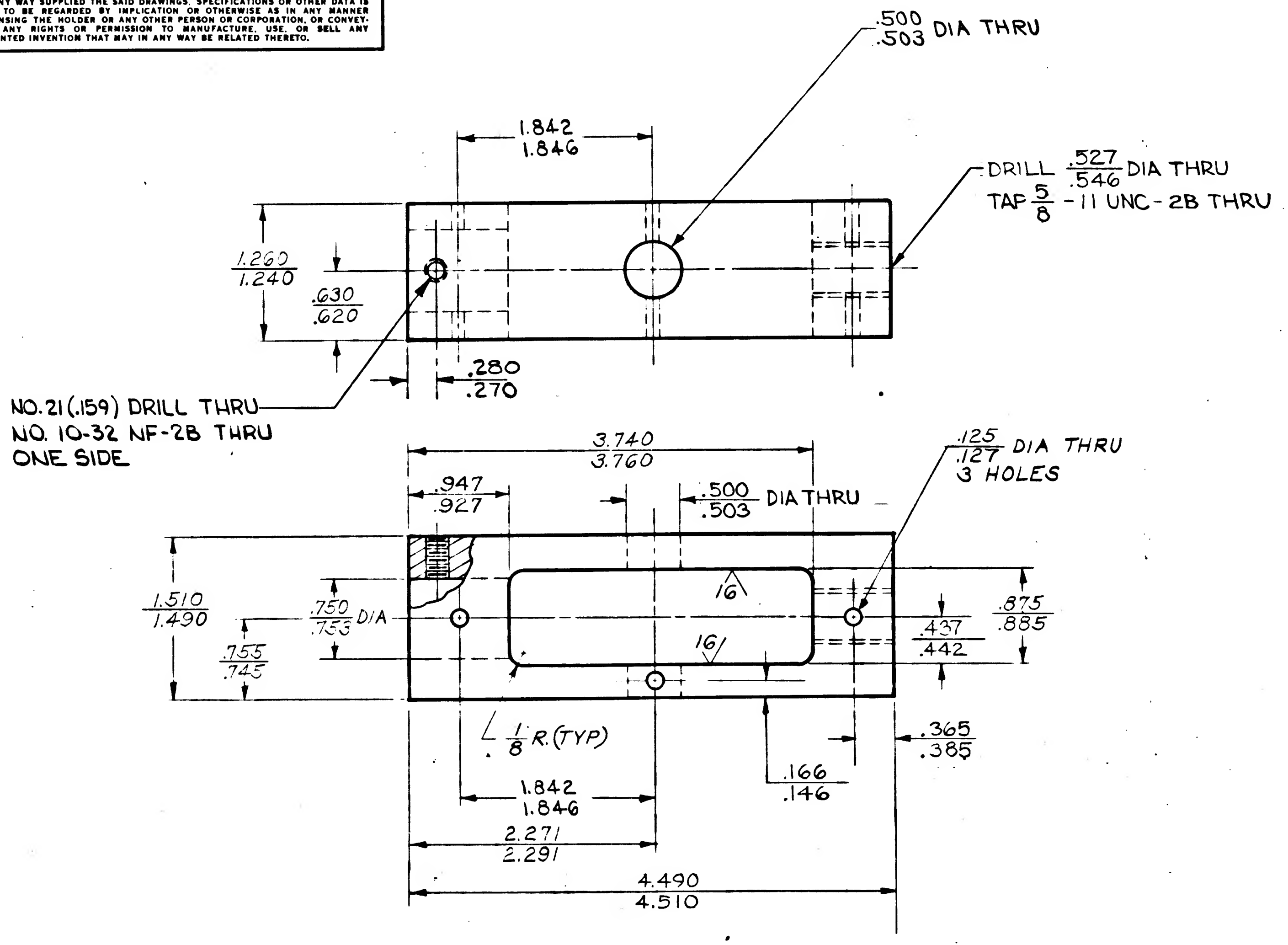
LINK, CHAIN & CABLE

CODE IDENT NO.	SIZE	DRAWING NO.
80230	C	1021628
SCALE 2/1		SHEET 1 OF 1

AC

NOTICE – WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REVISIONS						21995
SYM	ZONE	DESCRIPTION	DR	CHK	DATE	APPROVED
A		REVISED PER TDRR 24181	R. MICEK	EF	29 NOV 65	



NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH MIL-D-70327
2. $\sqrt{}^{32}$ ALL OVER UNLESS OTHERWISE SPECIFIED
3. BREAK SHARP EDGES $\frac{.005}{.015}$
4. PAINT ALL EXTERIOR SURFACES AS FOLLOWS:
   - A. APPLY PRIMER SURFACER PER TT-P-659
   - B. APPLY 2 COATS OF ACCENT GRAY SEMI-GLOSS ENAMEL PER TT-E-529, CLASS A COLOR NO. 26251 OF FED-STD-595
5. MATERIAL: STEEL, PER MIL-S-6758A (4130)

QTY REQD	PART OR IDENTIFYING NO.	MATERIAL OR NOTES	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY	USED ON
1015462-011	1015462-011

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
CAPACITOR VALUES ARE IN μf
RESISTOR VALUES ARE IN OHMS
TOLERANCES ON
FRACTIONS ± 1/64 DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING

MATERIAL
SEE NOTE 5

MIT
INSTRUMENTATION LAB
CAMBRIDGE, MASS.

DRAWN	F. P. Grasso	1-13-65
CHECKED		3-5-65
APPROVED	C. Gedeman	3/5/65
APPROVED		
APPROVED MIT		11 Jan 65
APPROVED MSC		
		DATE

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

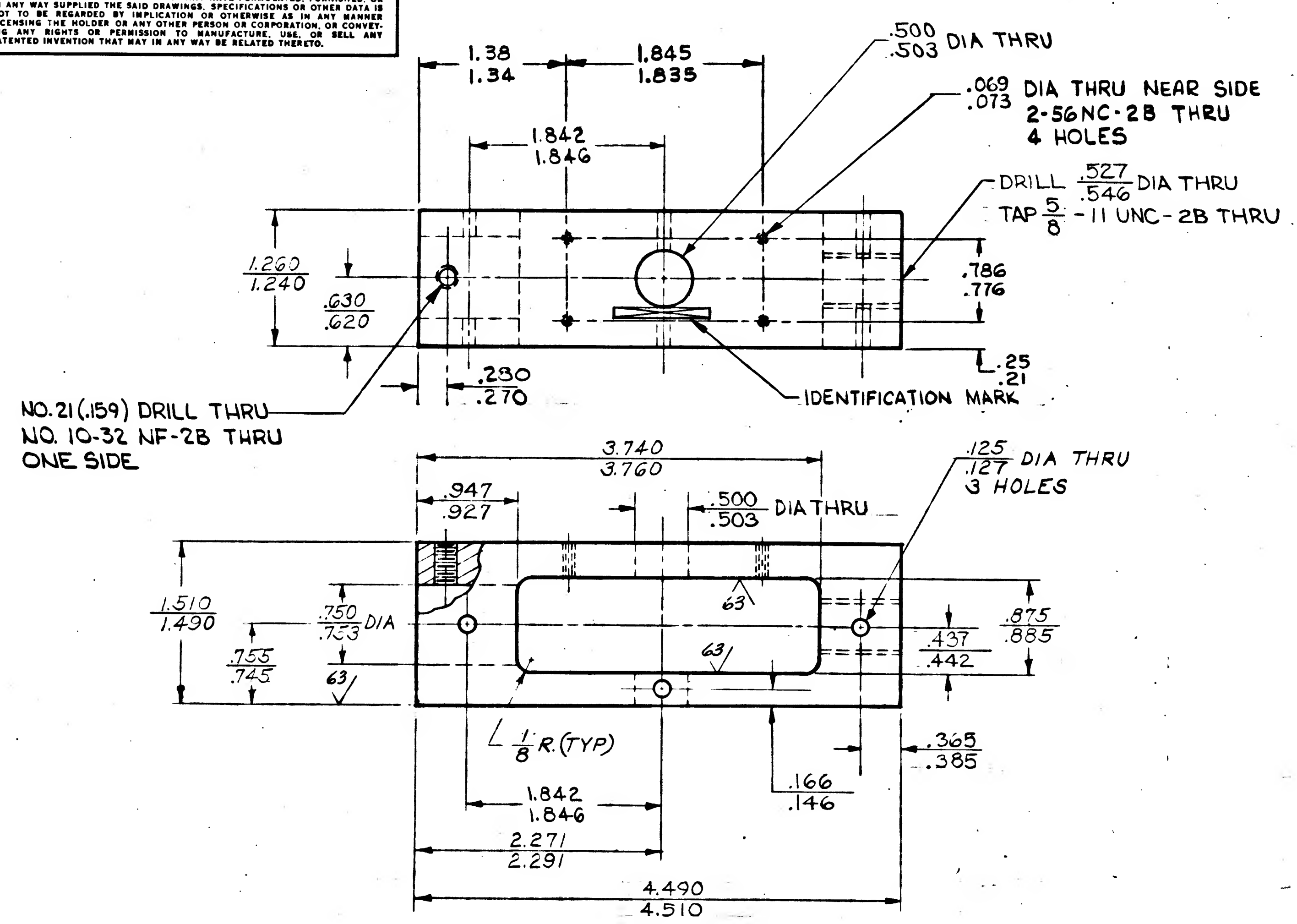
HOUSING

CODE IDENT NO.	SIZE	DRAWING NO.
80230	C	1021630

SCALE 1/1 SHEET 1 OF 1

1021630 A

NOTICE – WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.



REVISIONS						
SYM	ZONE	DESCRIPTION	DR	CHK	DATE	APPROVED
Ⓜ A		REVISED PER TDRR 24181	Hmicek	EF	29 NOV 65	
B		REVISED PER TDRR 26088	K	MEM	16 FEB 66	

21995

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH MIL-D-70327
2. 125√ ALL OVER UNLESS OTHERWISE SPECIFIED
3. BREAK SHARP EDGES .005/.015
4. PAINT ALL EXTERIOR SURFACES AS FOLLOWS:
   - A. APPLY PRIMER SURFACER PER TT-P-659
   - B. APPLY 2 COATS OF ACCENT GRAY SEMI-GLOSS ENAMEL PER TT-E-529, CLASS A COLOR NO. 26251 OF FED-STD-595
5. MATERIAL: STEEL, PER MIL-S-6758A (4130)
6. IDENTIFY USING DRAWING NUMBER PER MIL-STD-130 (ES 267).

QTY REQD	PART OR IDENTIFYING NO.	MATERIAL OR NOTES	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY	USED ON
1015462-011	1015462-011

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
CAPACITOR VALUES ARE IN µf
RESISTOR VALUES ARE IN OHMS
TOLERANCES ON
FRACTIONS ± 1/64 DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING

MATERIAL
SEE NOTE 5

MIT
INSTRUMENTATION LAB
CAMBRIDGE, MASS.

DRAWN	F. P. Grasso	1-13-65
CHECKED	A. Herman	3-5-65
APPROVED	C. Gedeman	3/5/65
APPROVED		
APPROVED MIT	W.	11 Jan 65
APPROVED MSC		DATE

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

HOUSING

CODE IDENT NO.	SIZE	DRAWING NO.
80230	C	1021630
SCALE 1/1		SHEET 1 OF 1

1021630 B

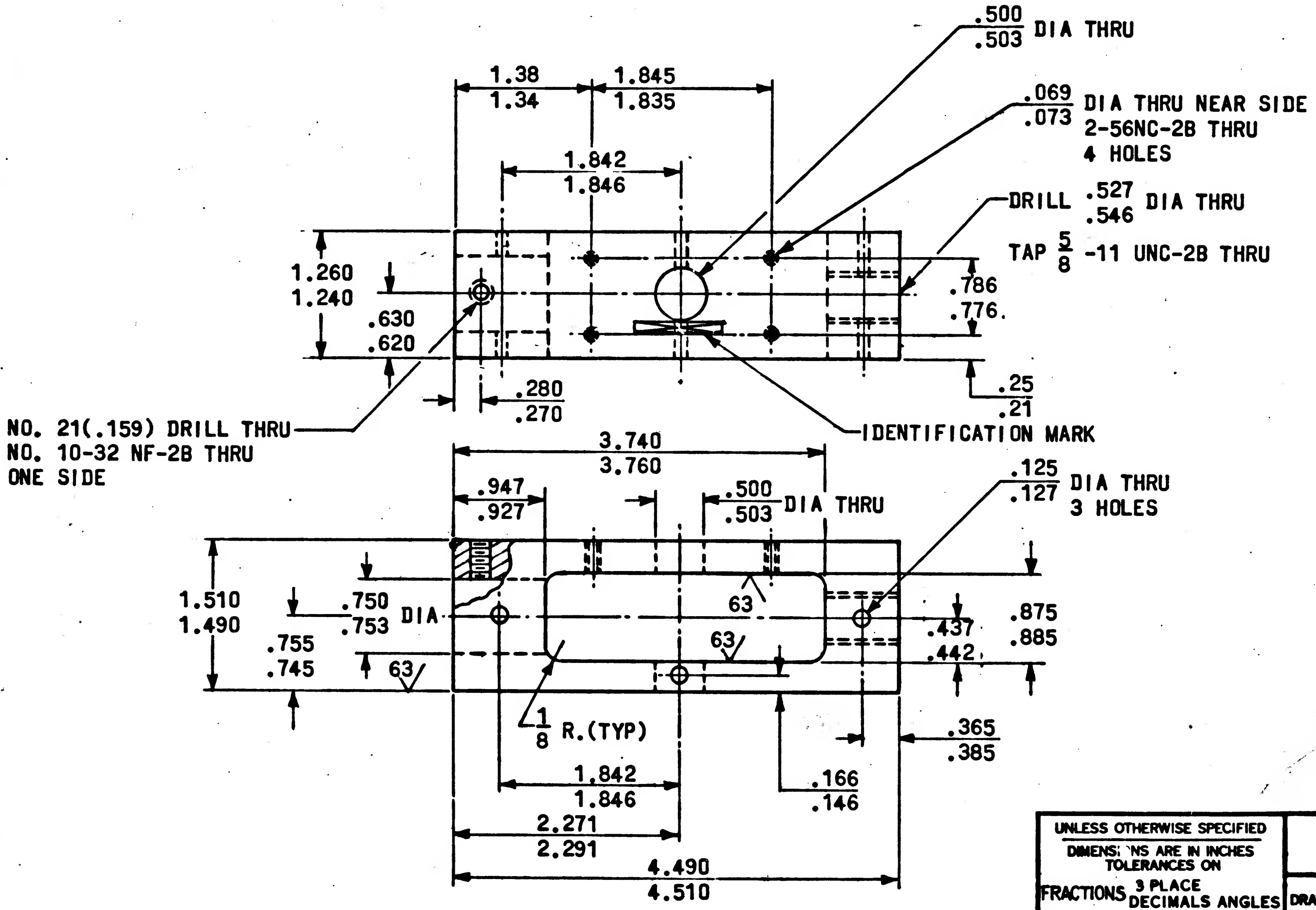
NOTICE — WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REVISIONS

ZONE	LTR	DESCRIPTION	DATE	APPROVED
—	C	REPLACES REV B WITHOUT CHANGE PER TDRR 29219	20 APR 66	JJJ

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH MIL-D-70327.
2. $125\sqrt{}$ ALL OVER UNLESS OTHERWISE SPECIFIED.
3. BREAK SHARP EDGES .005/.015.
4. PAINT ALL EXTERIOR SURFACES AS FOLLOWS:
   A. APPLY PRIMER SURFACER PER TT-P-659.
   B. APPLY 2 COATS OF ACCENT GRAY SEMI-GLOSS ENAMEL PER TT-E-529, CLASS A COLOR NO. 26251 OF FED-STD-595.
5. MATERIAL: STEEL, PER MIL-S-6758A (4130).
6. IDENTIFY USING DRAWING NUMBER PER MIL-STD-130 (ES267).



MASTER

1015462-011	1015462-011
NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± 1/64
3 PLACE DECIMALS ±
ANGLES ±
DO NOT SCALE THIS DRAWING
MATERIAL SEE NOTE 5
APPROVAL

MIT
INSTRUMENTATION LAB
CAMBRIDGE, MASS.
DRAWN F. P. GRASSO DATE 13 JAN 65
CHECKED C Stemwerde/LSC
APPROVAL I Gehimeau 5/26/66
CONTRACT
NASA APPROVAL A. C. METZGER
MIT APPROVAL MG Murly 6-1-66

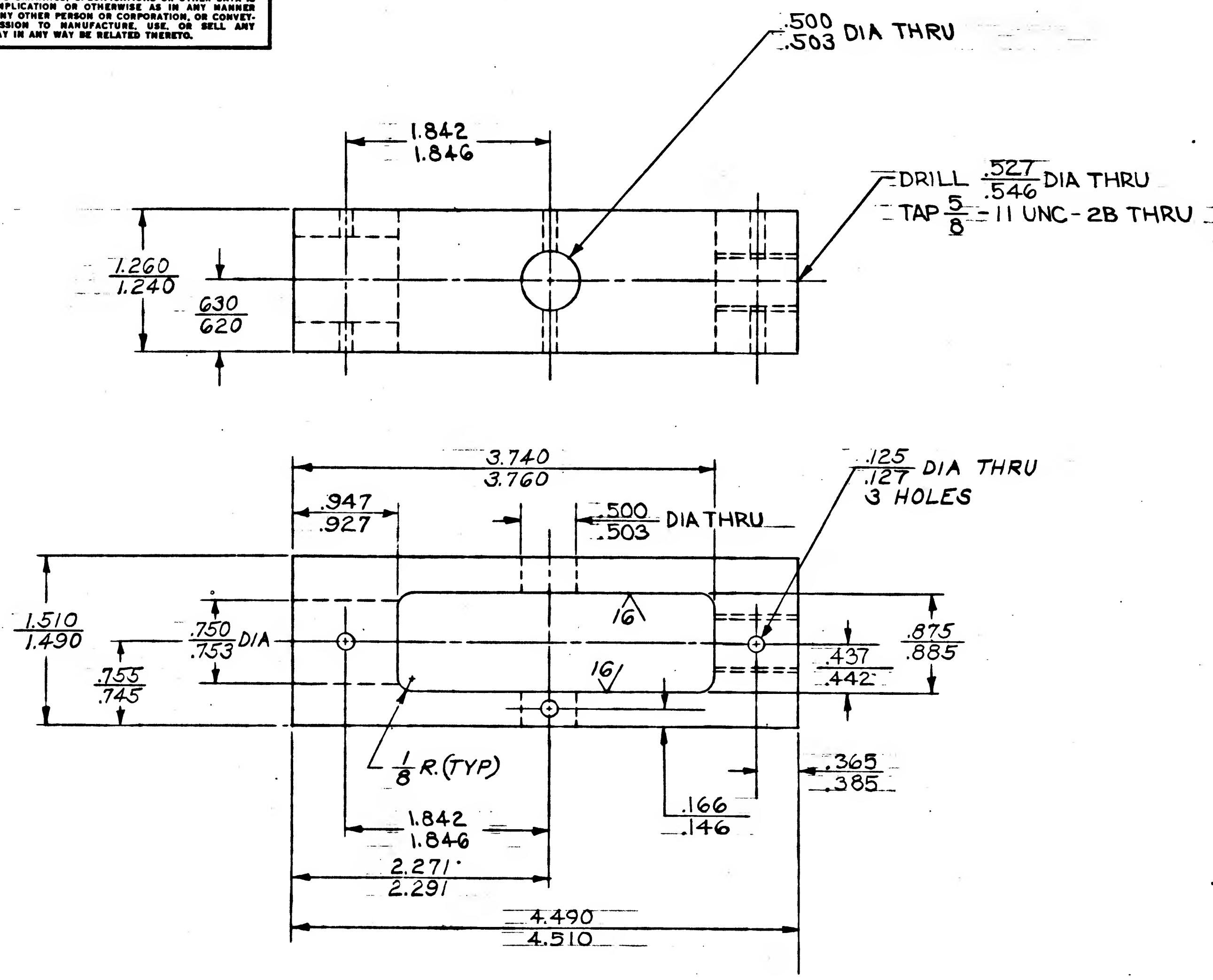
MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

HOUSING

SIZE C
CODE IDENT NO. 80230
1021630
SCALE 1/1
SHEET 1 OF 1

NOTICE — WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REVISIONS						21995
SYM	ZONE	DESCRIPTION	DR	CHK	DATE	APPROVED



NOTES:
1. INTERPRET DRAWING IN ACCORDANCE WITH MIL-D-70327
2. $\sqrt[32]{}$ ALL OVER UNLESS OTHERWISE SPECIFIED
3. BREAK SHARP EDGES $\frac{.005}{.015}$
4. PAINT ALL EXTERIOR SURFACES AS FOLLOWS:
   - A. APPLY PRIMER SURFACER PER TT-P-659
   - B. APPLY 2 COATS OF ACCENT GRAY SEMI-GLOSS ENAMEL PER TT-E-529, CLASS A COLOR NO. 26251 OF FED-STD-595
5. MATERIAL: STEEL, PER MIL-S-6758A (4130)

QTY REQD	PART OR IDENTIFYING NO.	MATERIAL OR NOTES	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

1015462-011	1015462-011
NEXT ASSY	USED ON

APPLICATION

MASTER

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
CAPACITOR VALUES ARE IN μf
RESISTOR VALUES ARE IN OHMS
TOLERANCES ON
FRACTIONS ± 1/64 DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING

MATERIAL SEE NOTE 5

MIT
INSTRUMENTATION LAB
CAMBRIDGE, MASS.

DRAWN	F. P. Grasso	1-13-65
CHECKED	D. Hermon Jr	3-5-65
APPROVED	C. Gedeman	3/5/65
APPROVED		
APPROVED MIT	W. Kupfer	7 May 65
APPROVED MSC	A. C. Metz	
		DATE

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

HOUSING

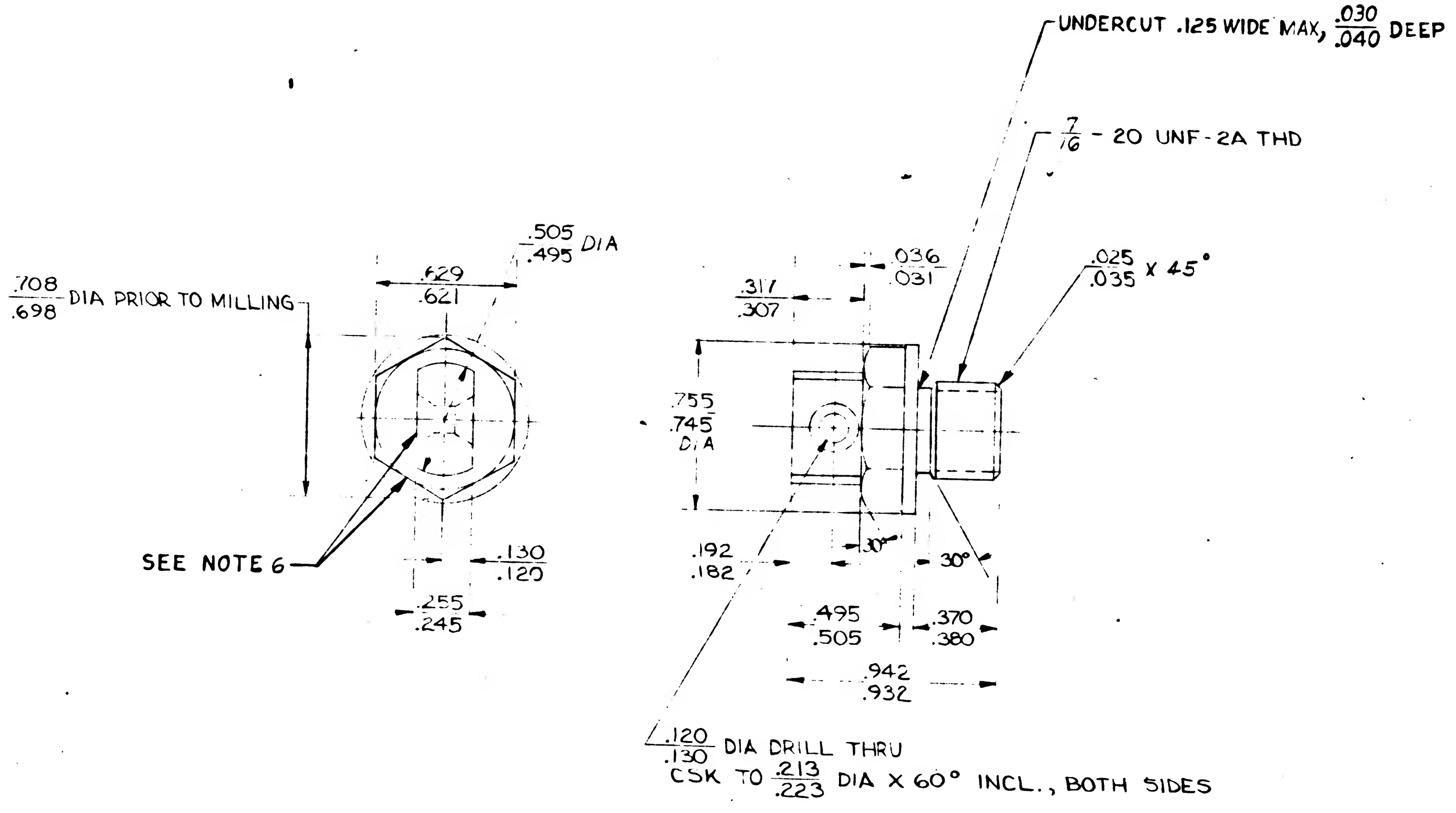
CODE IDENT NO.	SIZE	DRAWING NO.
80230	C	1021630
SCALE 1/1		SHEET 1 OF 1

AC

NOTICE – WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REVISIONS 21995

SYM	ZONE	DESCRIPTION	DR	CHK	DATE	APPROVED
A		REVISED PER TDRR 24343	LK		30 NOV 65	



NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH MIL-D-70327
2. 32√ ALL OVER UNLESS OTHERWISE SPECIFIED
3. BREAK SHARP EDGES .005/.015
4. MATERIAL : STEEL, STAINLESS PER QQ-S-763, CLASS 416
5. FINISH: PASSIVATE PER MIL-F-14072 E-300.
6. TANG CAN BE ORIENTED IN ANY POSITION WITH RESPECT TO HEX.

QTY REQD	PART OR IDENTIFYING NO.	MATERIAL OR NOTES	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY	USED ON
1015462-011	1015462-011

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
CAPACITOR VALUES ARE IN μf
RESISTOR VALUES ARE IN OHMS
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ± 5°
DO NOT SCALE THIS DRAWING

MATERIAL
SEE NOTE 4

MIT
INSTRUMENTATION LAB
CAMBRIDGE, MASS.

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

DRAWN		2-8-65
CHECKED		3-5-65
APPROVED	C. Johnson	3/5/65
APPROVED		
APPROVED MIT		
APPROVED MSC		
		DATE

SCREW

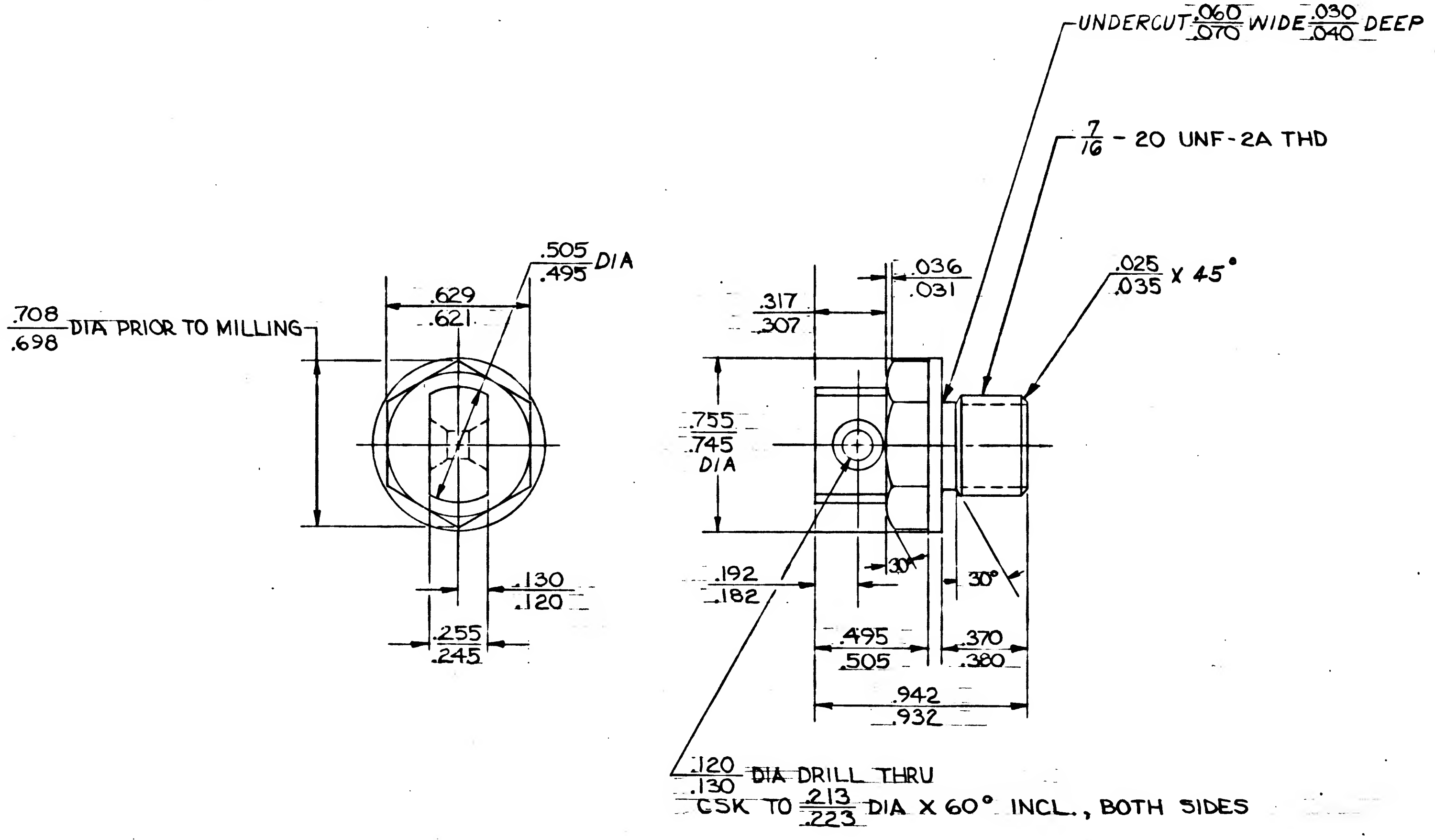
CODE IDENT NO 80230
SIZE C
DRAWING NO 1021631
SCALE 2/1
SHEET 1 OF 1

1021631 A

NOTICE — WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REVISIONS 21995

SYM	ZONE	DESCRIPTION	DR	CHK	DATE	APPROVED


UNDERCUT $\frac{.060}{.070}$ WIDE $\frac{.030}{.040}$ DEEP
$\frac{7}{16}$ - 20 UNF-2A THD
$\frac{.505}{.495}$ DIA
$\frac{.708}{.698}$ DIA PRIOR TO MILLING
$\frac{.629}{.621}$
$\frac{.317}{.307}$
$\frac{.036}{.031}$
$\frac{.025}{.035}$ X 45°
$\frac{.755}{.745}$ DIA
30°
30°
$\frac{.130}{.120}$
$\frac{.255}{.245}$
$\frac{.192}{.182}$
$\frac{.495}{.505}$
$\frac{.370}{.380}$
$\frac{.942}{.932}$
$\frac{.120}{.130}$ DIA DRILL THRU
CSK TO $\frac{.213}{.223}$ DIA X 60° INCL., BOTH SIDES

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH MIL-D-70327
2. $\sqrt[32]{}$ ALL OVER UNLESS OTHERWISE SPECIFIED
3. BREAK SHARP EDGES $\frac{.005}{.015}$
4. MATERIAL: STEEL, STAINLESS PER QQ-S-763, CLASS 416
5. FINISH: PASSIVATE PER MIL-F-14072, E-300.

QTY REQD	PART OR IDENTIFYING NO.	MATERIAL OR NOTES	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

1015462-011	1015462-011
NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
CAPACITOR VALUES ARE IN μf
RESISTOR VALUES ARE IN OHMS
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ± 5°
DO NOT SCALE THIS DRAWING

MATERIAL
SEE NOTE 4

MASTER

MIT
INSTRUMENTATION LAB
CAMBRIDGE, MASS.

DRAWN 2-8-65
CHECKED 3-5-65
APPROVED 3/5/65
APPROVED
APPROVED MIT
APPROVED MSC
DATE

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

SCREW

CODE IDENT NO.	SIZE	DRAWING NO.
80230	C	1021631

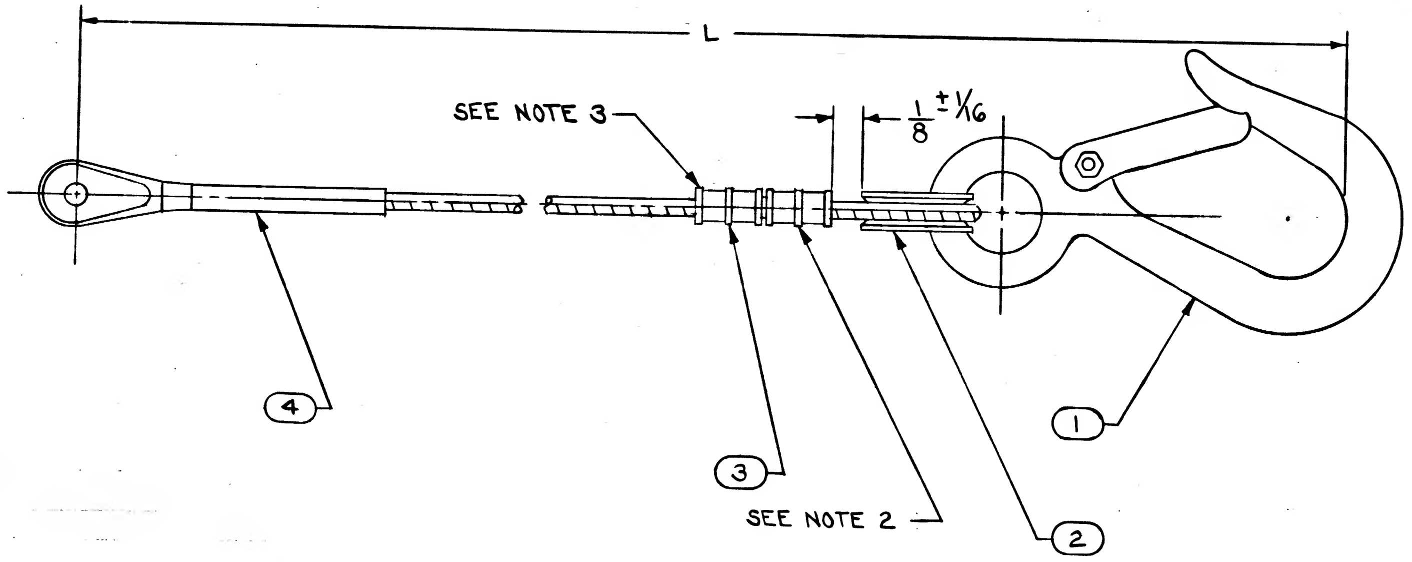
SCALE 2/1
SHEET 1 OF 1

AC

NOTICE – WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REVISIONS 21995

SYM	ZONE	DESCRIPTION	DR	CHK	DATE	APPROVED



DASH	L ± 1/4
001	24
002	19 5/16

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH MIL-D-70327
2. SWAGED SLEEVE SHALL PRODUCE A CONNECTION WHICH CAN WITHSTAND A MINIMUM TENSIL FORCE OF 1500 LBS.
3. CABLE SHALL END WITHIN THE SECOND SLEEVE, $\frac{1}{16} \pm \frac{1}{16}$ FROM END.

QTY REQD	PART OR IDENTIFYING NO.	MATERIAL OR NOTES	NOMENCLATURE OR DESCRIPTION	FIND NO.
1	1021624		EYE END ASSY	4
2	1021589-001		SLEEVE, OVAL	3
1	AN100C-4		THIMBLE	2
1	1021542-001		HOOK, SNAP	1

LIST OF MATERIALS

MASTER

1015462-011	1015462-011
NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
CAPACITOR VALUES ARE IN μf
RESISTOR VALUES ARE IN OHMS
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING
MATERIAL

MIT
INSTRUMENTATION LAB
CAMBRIDGE, MASS.

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

DRAWN R.S. Jones 2-9-65
CHECKED 3-5-65
APPROVED 3-5-65
APPROVED
APPROVED MIT
APPROVED MSC
DATE

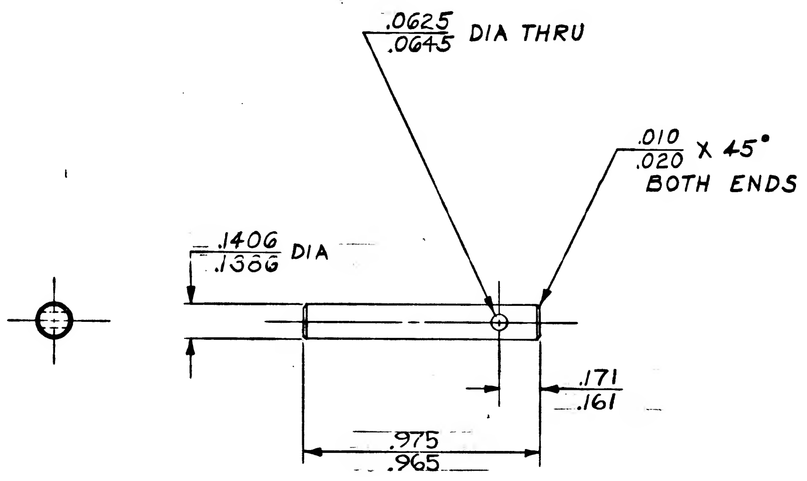
CABLE ASSY
INSEPARABLE ASSEMBLY

CODE IDENT NO. 80230
SIZE C
DRAWING NO. 1021632
SCALE 1/1
SHEET 1 OF 1

NOTICE — WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REVISIONS 21995

SYM	ZONE	DESCRIPTION	DR	CHK	DATE	APPROVED



NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH MIL-D-70327
2. $\overset{32}{\surd}$ ALL OVER UNLESS OTHERWISE SPECIFIED
3. BREAK SHARP EDGES $\frac{.005}{.015}$
4. MATERIAL: STEEL, STAINLESS PER QQ-S-763, CLASS 440C
5. HEAT TREAT:
   - A. HEAT TO 1950°F ± 15°F, HOLD FOR 15 MIN.
   - B. OIL QUENCH
   - C. TEMPER AT 600°F FOR 2 HOURS.
   - D. AIR COOL
6. FINISH: PASSIVATE PER MIL-F-14072, E300

MASTER

QTY REQD	PART OR IDENTIFYING NO.	MATERIAL OR NOTES	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

1015462-011	1015462-011
NEXT ASSY	USED ON

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
CAPACITOR VALUES ARE IN µf
RESISTOR VALUES ARE IN OHMS
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ± 5°
DO NOT SCALE THIS DRAWING

MATERIAL
SEE NOTE 4

MIT
INSTRUMENTATION LAB
CAMBRIDGE, MASS.

DRAWN F. P. Grasso 1-20-65
CHECKED [illegible] 3-5-65
APPROVED [illegible] 3/5/65
APPROVED
APPROVED MIT [illegible] [illegible]
APPROVED MSC
DATE

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

PIN, LINK

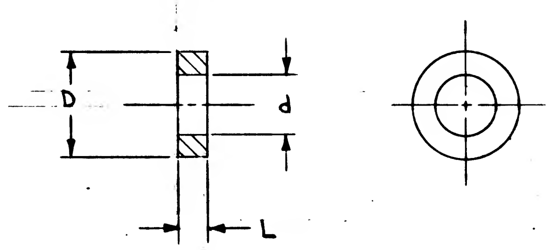
CODE IDENT NO. 80230
SIZE C
DRAWING NO. 1021633
SCALE 2/1
SHEET 1 OF 1

AC

NOTICE – WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REVISIONS 21995

SYM	ZONE	DESCRIPTION	DR	CHK	DATE	APPROVED



DASH	D	d	L
001	1.250 1.240	.500 .503	.353 .350
002	1.640 1.610	.500 .503	.293 .290
003	.375 .365	.191 .193	.054 .050

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH MIL-D-70327.
2. $\sqrt{}^{32}$ ALL OVER UNLESS OTHERWISE SPECIFIED.
3. BREAK SHARP EDGES $^{.005}_{.015}$
4. MATERIAL: STAINLESS STEEL PER QQ-S-763, CLASS 416
5. FINISH: PASSIVATE PER MIL-F-14072, E300.

QTY REQD	PART OR IDENTIFYING NO.	MATERIAL OR NOTES	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

1015462-011	1015462-011
NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
CAPACITOR VALUES ARE IN μf
RESISTOR VALUES ARE IN OHMS
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING

MATERIAL
SEE NOTE 4

MIT
INSTRUMENTATION LAB
CAMBRIDGE, MASS.

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

		DATE
DRAWN	F. P. Grasso	8-20-65
CHECKED		8-20-65
APPROVED		8-20-65
APPROVED		
APPROVED MIT		
APPROVED MSC		

SPACER

CODE IDENT NO.	SIZE	DRAWING NO.
80230	C	1021634

SCALE ______ SHEET 1 OF 1

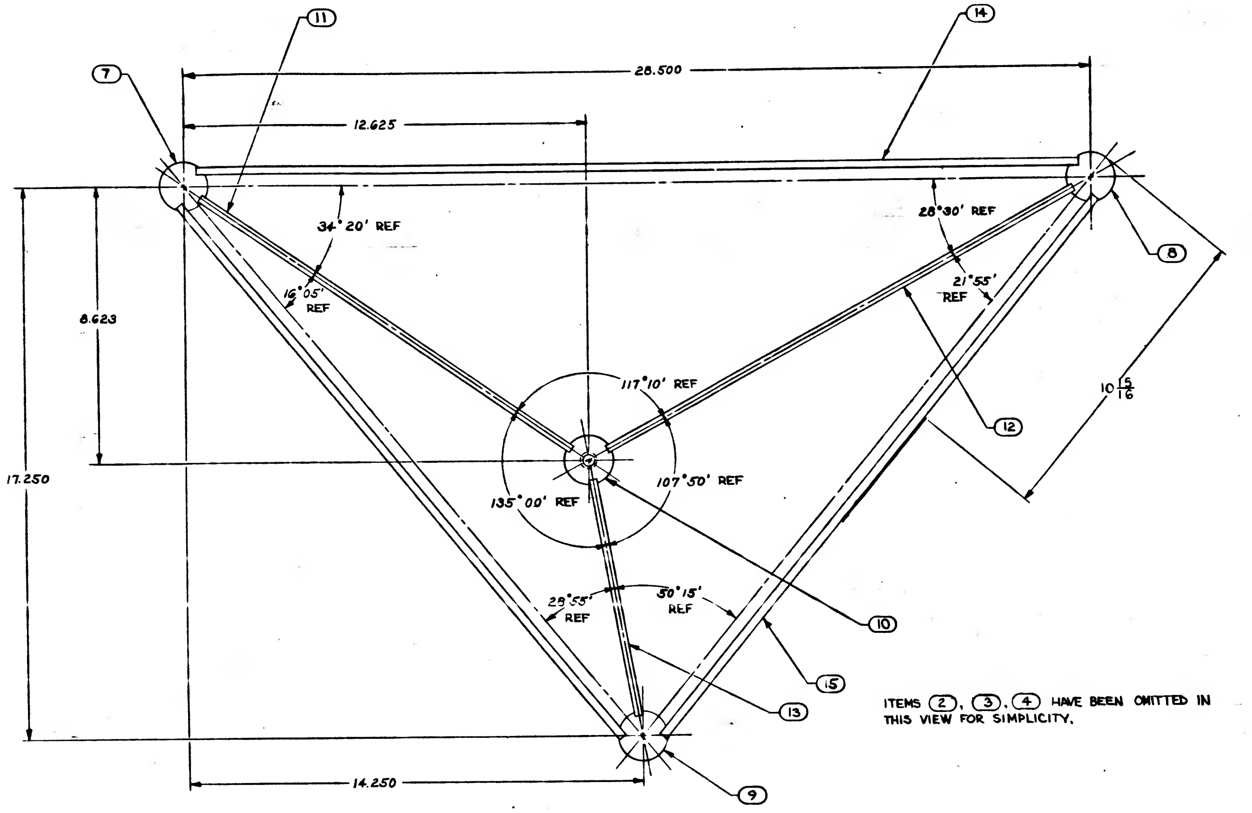
AC

MASTER

REVISIONS 21587

SYM	ZONE	DESCRIPTION	DR	CHK	DATE	APPROVED

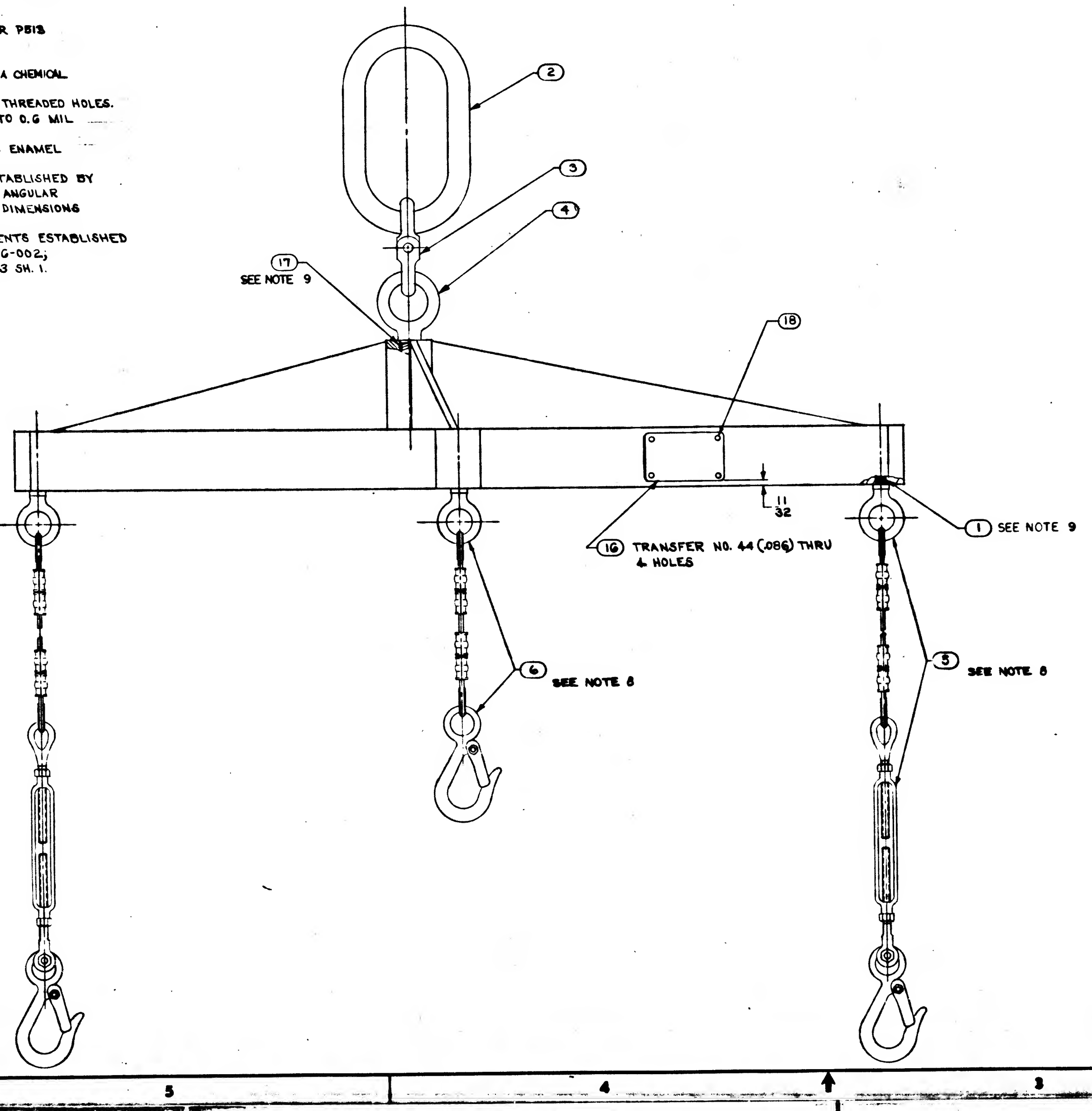
NOTICE — WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS, OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.



ITEMS ②, ③, ④ HAVE BEEN OMITTED IN THIS VIEW FOR SIMPLICITY.

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH MIL-D-70327
2. 63√ ALL OVER UNLESS OTHERWISE SPECIFIED
3. BREAK SHARP EDGES $\frac{.005}{.015}$
4. WELD ENTIRE FRAME (PARTS ⑦ THRU ⑮), USING INERT GAS SHIELDED METAL ARC, CONSUMABLE ELECTRODE CONTINUOUS FILLET WELD PER MIL-W-8604 (Aer)-1. ALL FILLET WELDS APPROX. $\frac{1}{4}$".
5. PENETRANT INSPECT PER MIL-I-6866
6. PRIOR TO INSTALLING THREAD INSERTS, PREPARE SURFACE PER P813 OF MIL-F-14072 AS FOLLOWS:
   - A. CLEAN PART PER SEC. 3.2 OF MIL-F-14072
   - B. PASSIVATE WITH EITHER AN ANODIC FILM PER MIL-A-8625 OR A CHEMICAL FILM PER MIL-C-5541
   - C. AFTER PASSIVATING AND PRIOR TO APPLYING PAINT, MASK THREADED HOLES.
   - D. PRIME WITH ONE COAT OF ZINC CHROMATE PRIMER, 0.4 TO 0.6 MIL (DRY FILM) THICK, PER-P-6889.
   - E. FINISH: PAINT TWO COATS OF ACCENT GRAY SEMI-GLOSS ENAMEL PER T.T.-E-529, CLASS A, COLOR NO. 26251.
7. ALL LINEAR DIMENSIONS SHOWN ARE REQUIREMENTS ESTABLISHED BY DRAWINGS 1019752, SHEET 3 & 1019753, SHEET 3. ALL ANGULAR DIMENSIONS SHOWN ARE DERIVED FROM THESE LINEAR DIMENSIONS AND ARE GIVEN HERE FOR REFERENCE ONLY.
8. LENGTHS OF ITEM ⑤ & ⑥ ARE BASED ON REQUIREMENTS ESTABLISHED BY ICD NO. MH01-01064-100, AND DRAWINGS NO. 1015916-002; 1017383, SH. 1,2; 1019202 SH. 1,4; 1019752 SH. 1; 1019753 SH. 1.
9. REMOVE TANG AFTER INSTALLATION OF THREAD INSERT.



MASTER

QTY REQD	PART OR IDENTIFYING NO.	MATERIAL OR NOTES	NOMENCLATURE OR DESCRIPTION	FIND NO.
4	MS 21318-15		SCREW, DRIVE, ROUND HEAD	18
1	MS21209-C8-20		THREAD INSERT	17
1	1004260-400		NAMEPLATE	16
2	1021596-2		TIE BAR	15
1	1021596-1		TIE BAR	14
1	1021595-3		STRUT	13
1	1021595-2		STRUT	12
1	1021595-1		STRUT	11
1	1021598		JOINT, CENTRAL	10
1	1021594		JOINT, LATERAL	9
1	1021593		JOINT, LATERAL	8
1	1021592		JOINT, LATERAL	7
1	1021599		CABLE ASSY	6
2	1021597		CABLE ASSY	5
1	1006674-5		BOLT, EYE	4
1	1021588		LINK, COUPLING	3
1	1021543		LINK, OBLONG-MASTER	2
3	MS 21209-C5-20		THREAD INSERT	1

LIST OF MATERIALS

NEXT ASSY	USED ON
FINAL	

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
CAPACITOR VALUES ARE IN μf
RESISTOR VALUES ARE IN OHMS
TOLERANCES ON
FRACTIONS ± 1/64 DECIMALS ± .005 ANGLES ±
DO NOT SCALE THIS DRAWING

MATERIAL

MIT
INSTRUMENTATION LAB
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MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

DRAWN 3/17/65
CHECKED 3-10-65
APPROVED
APPROVED
APPROVED MIT 3/1/65
APPROVED MSC
DATE

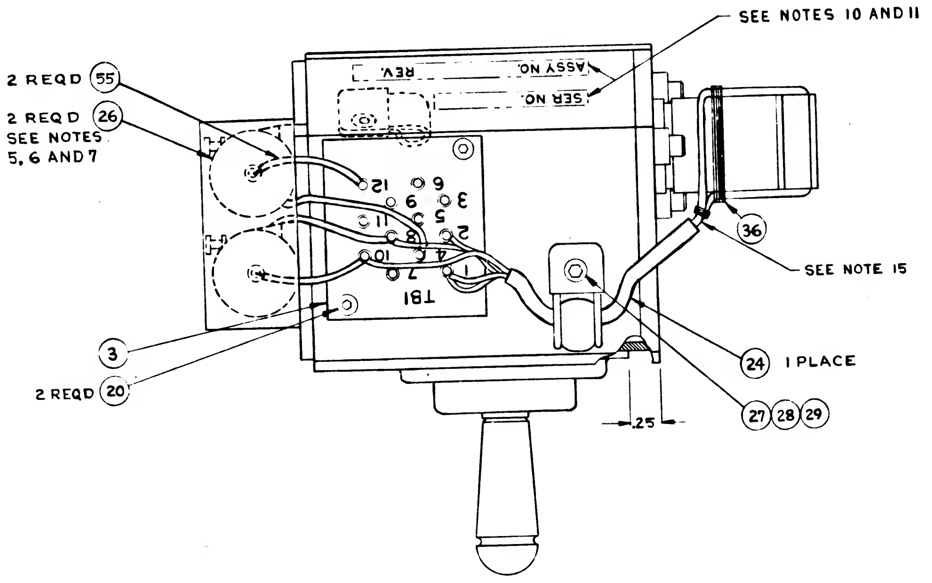
LIFTING SLING
G&N INSTL QUALIFICATION FIXTURE
&
AZIMUTH REFERENCE FIXTURE

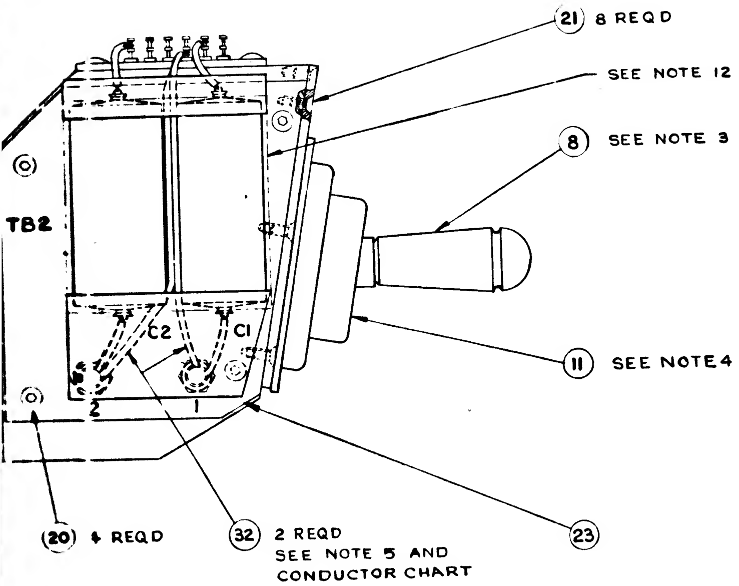
CODE IDENT NO.
SIZE E
DRAWING NO. 1021540
SCALE 1/2
SHEET 1 OF 1

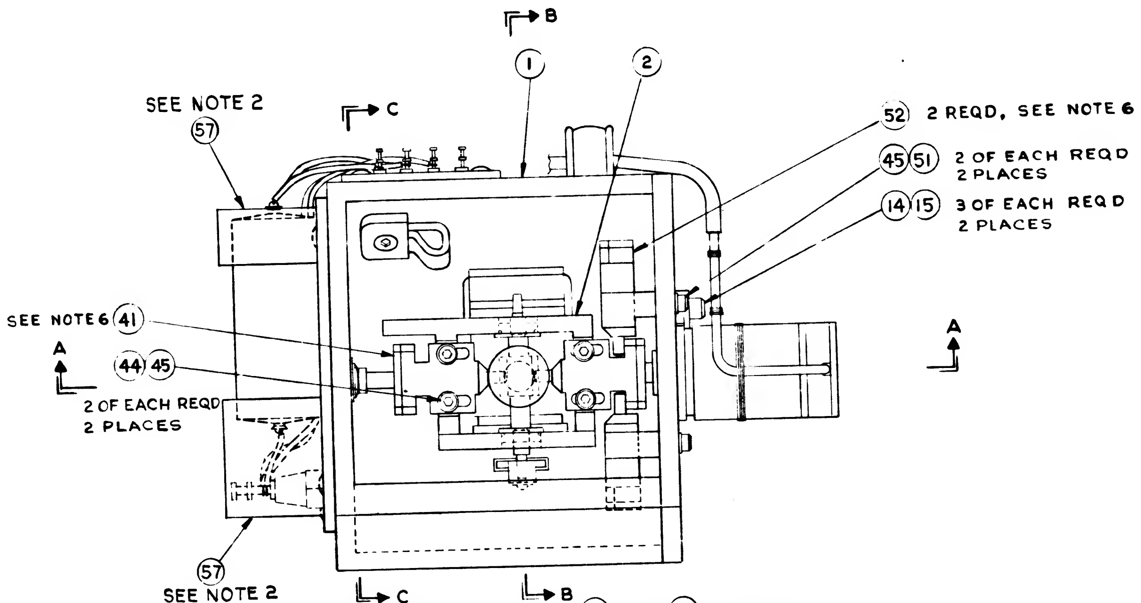
SYM	ZONE	REVISIONS DESCRIPTION	DATE	APPROVAL
		INITIAL CLASS A RELEASE TDRR NO. 13028		
A		REVISED PER TDRR 14598	8 DEC 64	JJJ

CONDUCTOR	FROM	STRIP	TIN	TO	STRIP	TIN	ITEM NO.	LENGTH
B1 - RED (P1)	B1 - P1			TB1-2	.30	YES		8.00
B1 - YEL (P2)	B1 - P2			TB1-1				
B1 - BLK (P3)	B1 - P3			TB1-1				
B1 - YEL (S2)	B1 - S2			TB1-8				
B1 - BLU (S4)	B1 - S4			TB1-[illegible]				8.00
B2 - RED (P1)	B2 - P1			TB1-3				5.25
B2 - YEL (P2)	B2 - P2			TB1-1				
B2 - BLK (P3)	B2 - P3			TB1-1				
B2 - YEL (S2)	B2 - S2			TB1-4				
B2 - BLU (S4)	B2 - S4			TB1-2				5.25
AA-1 YEL	TB2-1	.30	YES	TB1-8			32	6.00
AA-2 YEL	TB2-2	.30	YES	TB1-4	.30	YES	32	6.00
B1 - RED (S1)	B1 - S1			TB1-9				8.00
B1 - BLK (S3)	B1 - S3			TB1-5				8.00
B2 - RED (S1)	B2 - S1			TB1-7				5.25
B2 - BLK (S3)	B2 - S3			TB1-6	.30	YES		5.25

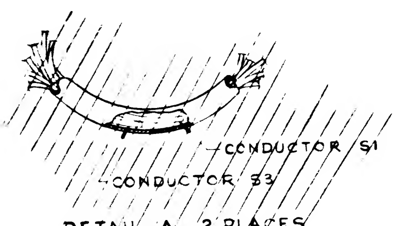
SEE NOTE 14
SEE NOTE 14



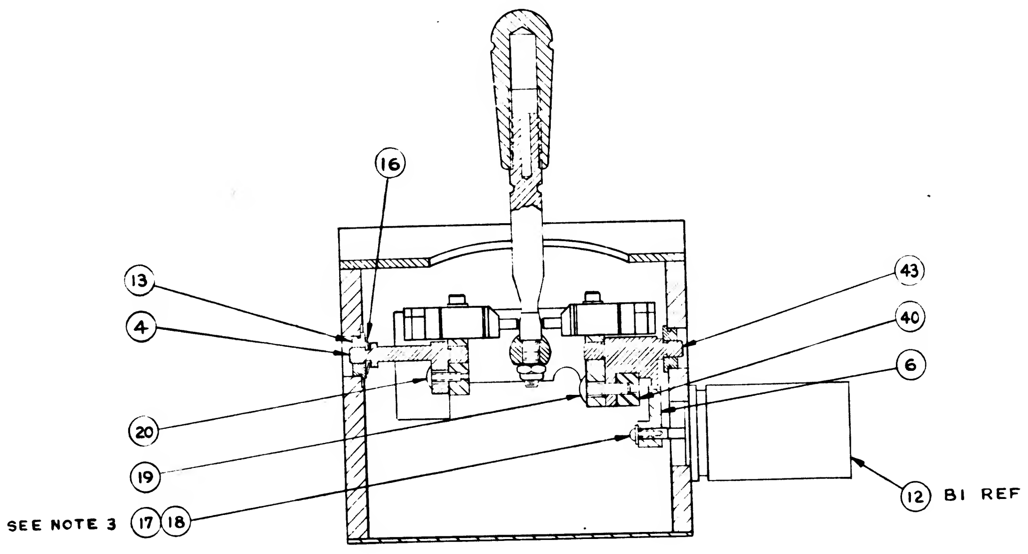




VIEW SHOWN WITH ITEMS 9 AND 11 REMOVED



DETAIL A 2 PLACES
SEE NOTE 17



PARTIAL SECTION A-A

				011	EFFECTIVITY	ITEM NO.	PART OR IDENTIFYING NO	NOMENCLATURE OR DESCRIPTION
SEE NOTE 13				AR		57	1012503	POLYURETHANE POTTING COMPOUND
~~SEE NOTE 13~~				~~AR~~		~~56~~	~~1010476-C82~~	~~INSULATION SLEEVING~~
SEE NOTE 13				AR		55	1010476-232	INSULATION SLEEVING
~~SEE NOTE 13~~				~~AR~~		~~54~~	~~1010476-172~~	~~INSULATION SLEEVING~~
				AR		53	MIL-A-25457	ADHESIVE-SILICONE RUBBER(ES-2531)
				2		52	1014695	PLUNGER ASSY, TRUNNION AXIS
SEE NOTE 13				4		51	1011625-11	SCREW, CAP, SOC HD
				AR		50	MIL-S-22473	SEALING COMP, RETAINING, GRADE C
SEE NOTE 13				AR		49	1010750	CURING AGENT, POLYAMIDE (ES-2760)
				AR		48	1010749	FILLER, CALCIUM CARBONATE
				AR		47	1010748	RESIN, EPOXY (ES-2779)
SEE NOTE 13				AR		46	1010718	PRIMER, SILICONE ADHESIVE
				8		45	MS-15795-302	WASHER, FLAT
SEE NOTE 13				4		44	1011625-13	SCREW, CAP, SOC HD
				1		43	1014535	GEAR SECTOR, 55T FULL GEAR, 96P
				1		42	1014536	SHAFT, HANDLE
				2		41	1014694	SPRING PLUNGER ASSY, SHAFT AXIS
				1		40	1014533	CAM, SECTOR
SEE NOTE 13				1		39	1010617-4	NUT-HEX, SELF LOCKING
SEE NOTE 2				AR		38	MIL-M-7866	MOLYBDENUM DISULFIDE POWDER
~~SEE NOTE 13~~				~~AR~~		~~37~~	~~1010476-C82~~	~~INSULATION SLEEVING~~
SEE NOTE 13				AR		36	1012507-004	TAPE, LACING
				AR		35	QQ-S-571	SOLDER SN 10
				REF		34	1015074	WIRING DIAGRAM
				REF		33	1015075	SCHEMATIC DIAGRAM, ELEC.
SEE NOTE 13				AR		32	1010789-001	WIRE, ELEC, TFE INSULATED, 24 AWG, YEL
				AR		31	MIL-F-14256 QQ-S-571	FLUX (ES-2798) FLUX-TYPE AR (ES-2175 TYPE 2)
				AR		30	QQ-S-571	SOLDER SN60 (ES-2175, ALLOY 1)
SEE NOTE 13				2		29	1010618-13	SCREW, BUTTON HD, SELF LKG, SOC HEX
				2		28	1011918-1	WASHER, CABLE CLAMP
				1		27	1000220-7	CLAMP, CABLE
				2		26	1010316	CAPACITOR, FIXED
				1		25	1000220-2	CLAMP, CABLE
SEE NOTE 13				AR		24	1006776-11	INSULATION, SLEEVING ELEC
				1		23	1021718-011	COMPONENT BOARD ASSY
SEE NOTE 13				6		22	1010618-1	SCREW, BUTTON HD, SELF LKG, SOC HEX
				8		21	1010628-1	SCREW, FLAT HD, SELF LKG, SOC HEX
				7		20	1010618-2	SCREW, BUTTON HD, SELF LKG, SOC HEX
SEE NOTE 13				1		19	1010618-15	SCREW, BUTTON HD, SELF LKG, SOC HEX
				3		18	MS-15795-701	WASHER-FLAT
SEE NOTE 13				3		17	1006783-1	SCREW, BUTTON HD, SOC HEX
SEE NOTE 13				1		16	1010608-1	WASHER-SPRING, CURVED
				6		15	NAS 1352 CC4 LL4	SCREW, CAP HD, SELF LKG, SOC HEX
SEE NOTE 13				6		14	1010415-1	CLAMP-SYNCHRO MOUNTING
SEE NOTE 13				4		13	1010418-000	BUSHING-FLANGED
SEE NOTE 13				2		12	1010429	SYNCHRO RESOLVER
				1		11	1014512	DIAPHRAGM-HAND CONTROLLER
				1		10	1014563	PLATE BOTTOM
				1		9	1014538	COVER ASSY, (INSEP)
				1		8	1014575	HANDLE
				1		7	1014570	SHAFT
				2		6	1014573	GEAR, SECTOR 72 T FULL GEAR, 96P
				1		5	1014571	GEAR, SECTOR, 55 T FULL GEAR, 96P
				1		4	1021719	SHAFT
				1		3	1014564	TERMINAL BOARD ASSY (INSEP)
				1		2	1014567	GIMBAL ASSY-MATCHED MACH.
				1		1	1014701	HOUSING ASSY-MATCHED MACH.

QUANTITY REQUIRED
LIST OF MATERIALS

NEXT ASSY	USED ON	APPLICABLE DASH NO.
1015053-011	1015053-011	-011

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± ~ DECIMALS .005 ±.02 ANGLES ± ~
DO NOT SCALE THIS DRAWING
MATERIAL ~
HEAT TREATMENT ~
FINAL FINISH ~
CONTRACT NAS9-497

SIGNATURES		DATE
DRAWN		10 SEPT 64
CHECKED	J Letang	23 SEPT
DESIGNER	E Metz	23 SEPT
ENGINEER		9 23 64

MIT APPROVAL 29 Sep 64
NASA APPROVAL 1-29-64

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

SEXTANT HAND CONTROLLER
ASSEMBLY

CODE IDEN NO
SIZE J
NASA DRAWING NO 1021700
SCALE 2/1
WT
SHEET 1 OF 1

1021700 A

24

1021700

2/1021700

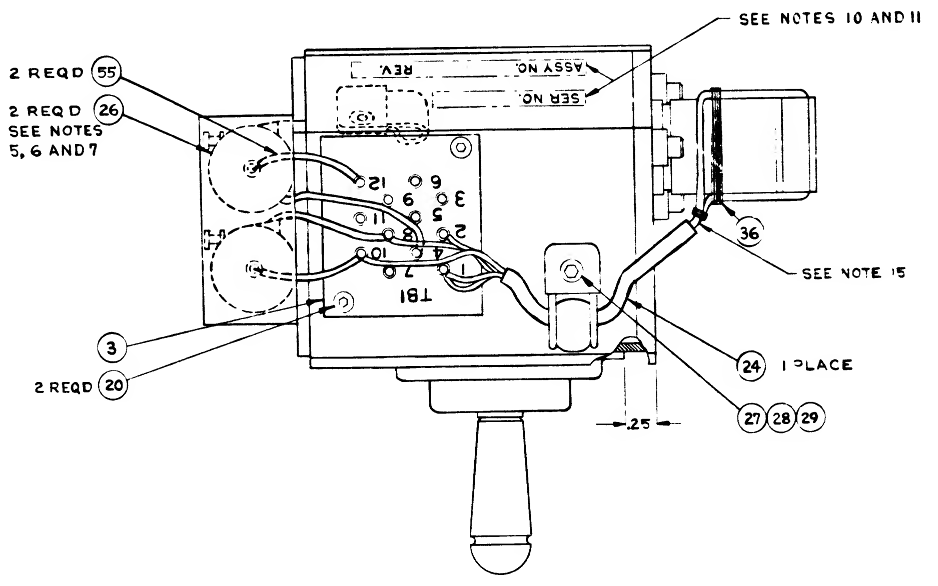
NOTES:

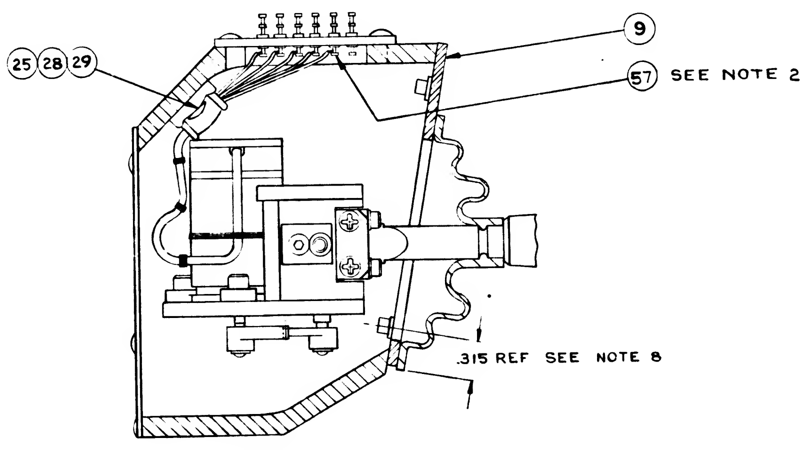
1. INTERPRET DWG IN ACCORDANCE WITH STD PRESCRIBED BY MIL-D-70327.
2. ASSEMBLE AND TEST PER ATP-1021700.
3. SECURE ITEM ⑧, AND ITEM ⑰, USING ITEM ㊿, PER ND1002211.
4. BOND ITEM ⑪ TO ITEM ⑨ PER ND 1002151, USING ITEM (53) AND ㊻.
5. SOLDER PER ND1002071, USING ITEM ㉚ AND ㉛.
6. BOND PER ND 1002203, USING ITEMS ㊼, ㊽ AND ㊾.
7. SELECT FROM 1010316-24 THRU-27.
8. EDGE OF DIAPHRAGM TO BE .315±.015 FROM LINE OF CENTER OF MOUNTING HOLES AS SHOWN.
9. INSPECT PER PS 1021700
10. IDENTIFY USING DWG NO. APPLICABLE DASH NO. AND REV LETTER PER ND 1002019.
11. SERIALIZE PER ND 1002023.
12. BONDING MATERIAL NOT TO EXCEED THIS AREA.
13. VENDOR ITEM: SEE SPEC CONTROL DWG.
14. SOLDER ALL LEADS ON UNDERSIDE OF TB1 USING ITEMS ㉟ AND ㉛.
15. SPOT TIE RESOLVER WIRES TO RESOLVER BODY, AND SPOT TIE RESOLVER WIRES TOGETHER AS NECESSARY, USING ITEM ㊱.
16. ~~DO NOT SHRINK UNTIL NEXT ASSY.~~
17. ~~CLIP CONDUCTORS S1 4.00 LONG AND S3 3.50 LONG (ITEM ⑫) RESOLVER. PUSH INSULATION BACK .37 AND CLIP WIRES. PULL INSULATION OVER CLIPPED ENDS.~~
18. ALL SCREWS AND THREADS NOT SECURED BY LOCKING DEVICES, SHALL BE SECURED USING ITEM ㊿ PER ND 1002211.
19. ~~MARK CONDUCTOR IDENTIFICATION PER ND 1002019 (ES-2475-7).~~

CONDUCTOR	FROM	STRIP	TIN	TO	STRIP	TIN	ITEM NO.	LENGTH
B1 - RED (P1)	B1 - P1			TB1-2	.30	YES		8.00
B1 - YEL (P2)	B1 - P2			TB1-1				
B1 - BLK (P3)	B1 - P3			TB1-1				
B1 - YEL (S2)	B1 - S2			TB1-8				
B1 - BLU (S4)	B1 - S4			TB1-10				8.00
B2 - RED (P1)	B2 - P1			TB1-3				5.25
B2 - YEL (P2)	B2 - P2			TB1-1				
B2 - BLK (P3)	B2 - P3			TB1-1				
B2 - YEL (S2)	B2 - S2			TB1-4				
B2 - BLU (S4)	B2 - S4			TB1-12				5.25
AA-1 YEL	TB2-1	.30	YES	TB1-8			32	6.00
AA-2 YEL	TB2-2	.30	YES	TB1-4	.30	YES	32	6.00
B1 - RED (S1)	B1 - S1			TB1-9				8.00
B1 - BLK (S3)	B1 - S3			TB1-5				8.00
B2 - RED (S1)	B2 - S1			TB1-7				5.25
B2 - BLK (S3)	B2 - S3			TB1-6	.30	YES		5.25

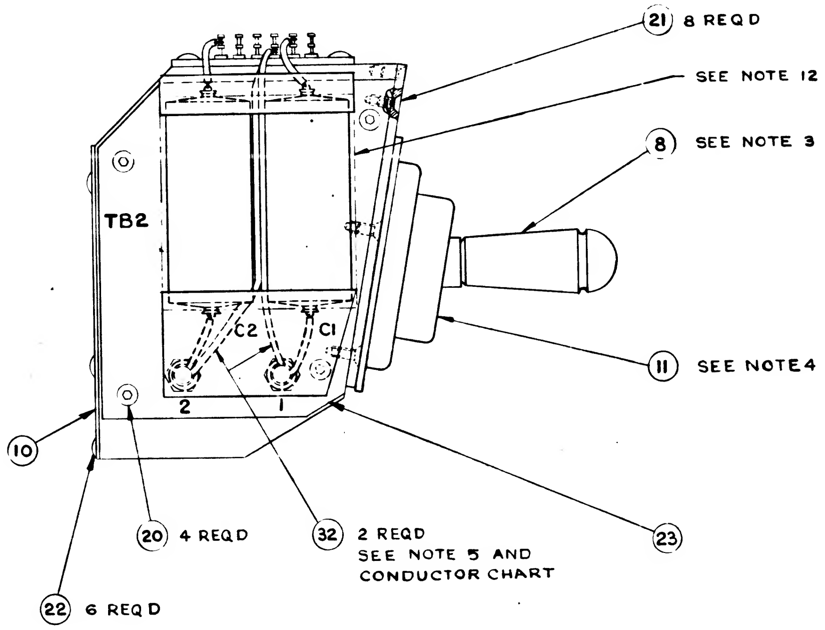
SEE NOTE 14 (B2 - RED (P1) through B2 - BLU (S4))

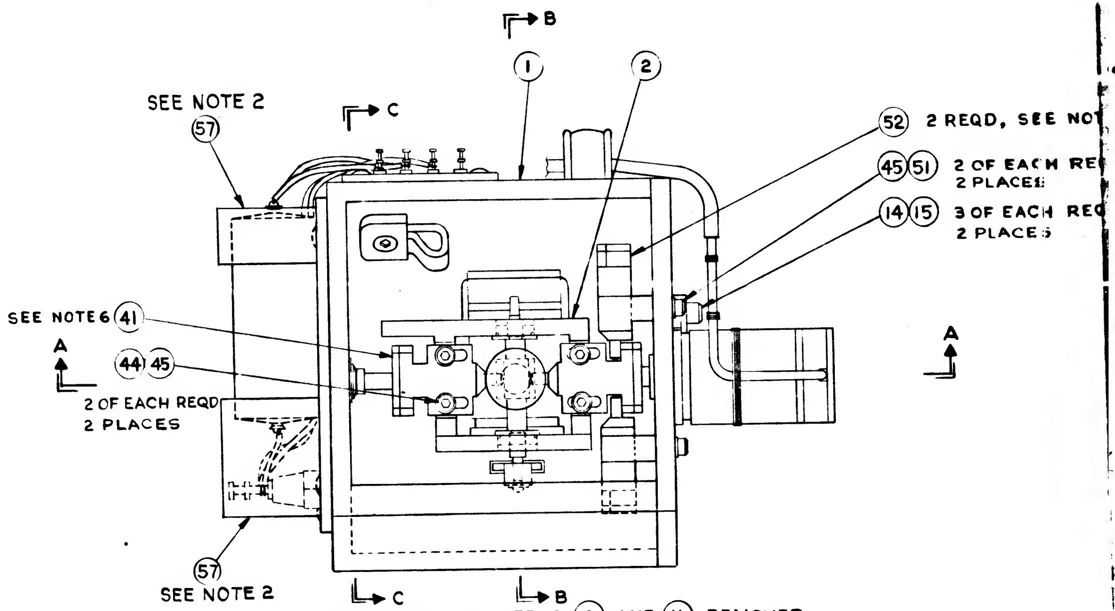
SEE NOTE 14 (B2 - RED (S1), B2 - BLK (S3))





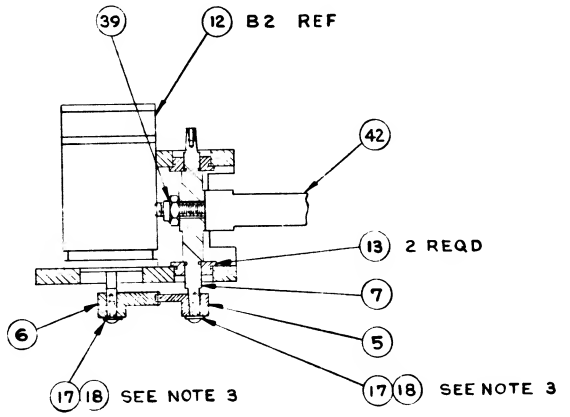
PARTIAL SECTION C-C



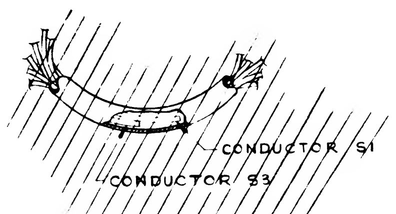


B
C
①
②
SEE NOTE 2 (57)
(52) 2 REQD, SEE NOT
㊺(51) 2 OF EACH RE 2 PLACES
⑭⑮ 3 OF EACH REQ 2 PLACES
SEE NOTE 6 ㊶
A
㊹㊺ 2 OF EACH REQD 2 PLACES
A
(57) SEE NOTE 2
C
B

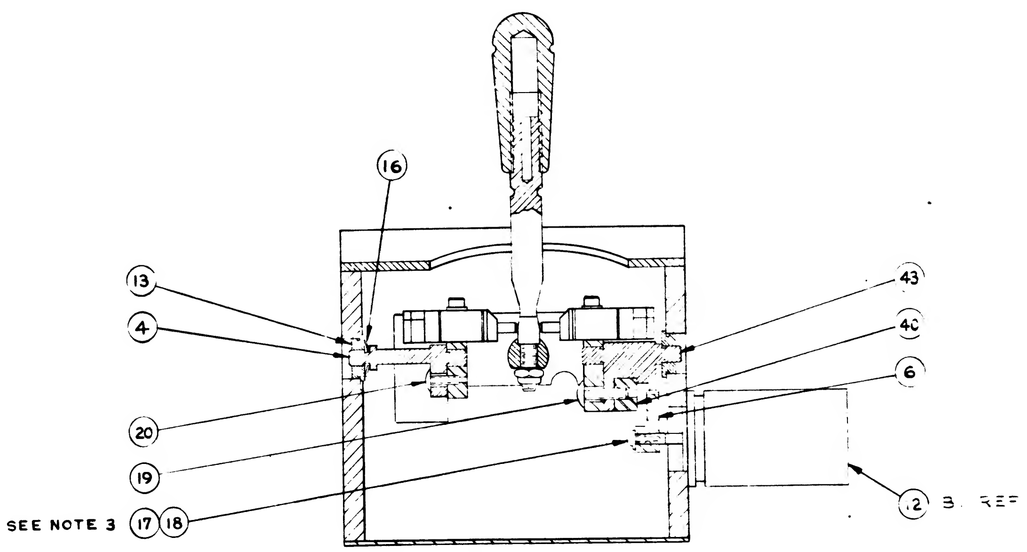
VIEW SHOWN WITH ITEMS ⑨ AND ⑪ REMOVED



PARTIAL SECTION B-B



DETAIL A 2 PLACES SEE NOTE 17

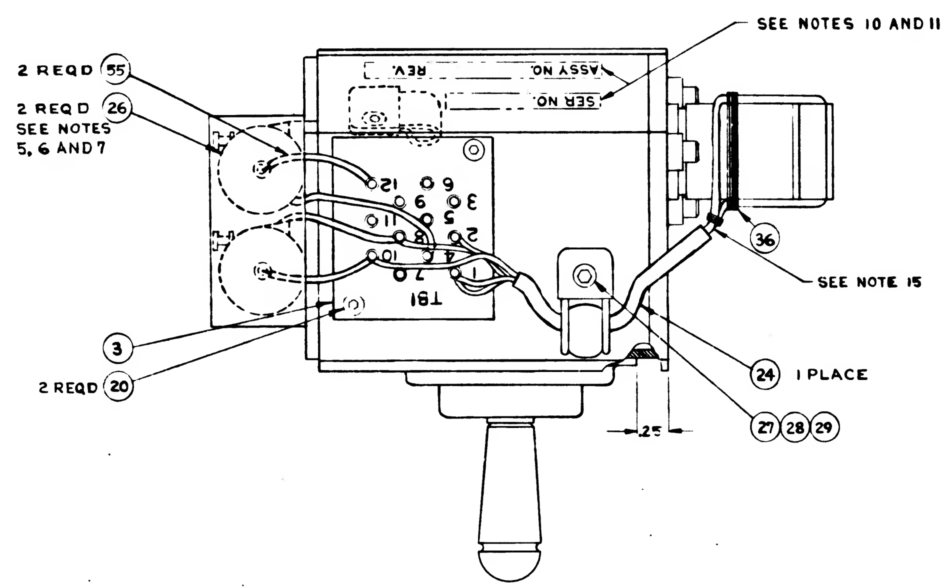


PARTIAL SECTION A-A

1021700

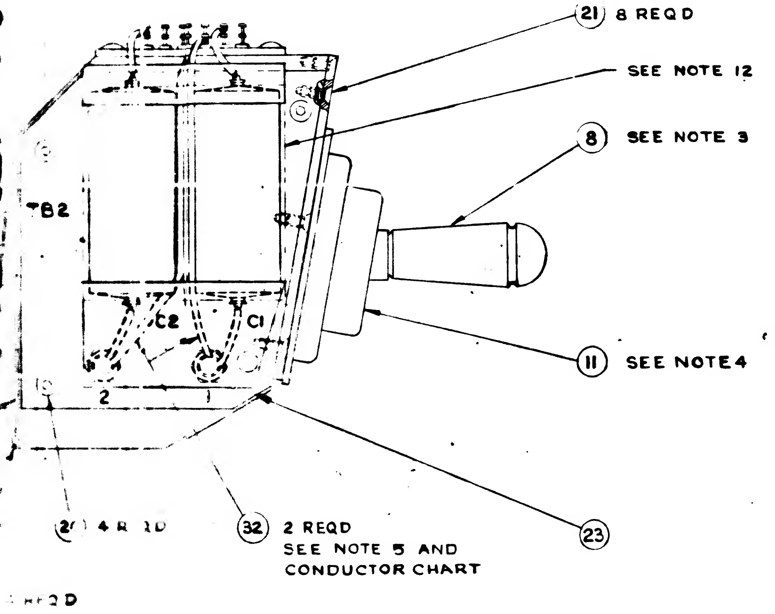
1/1021700

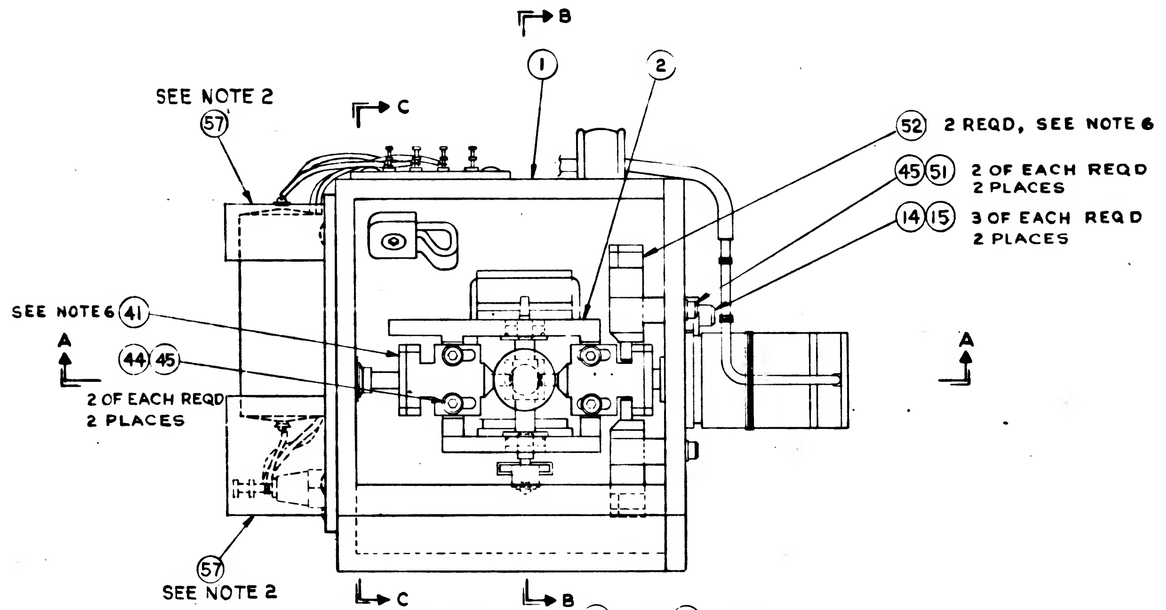
	CONDUCTOR	FROM	STRIP	TIN	TO	STRIP	TIN	ITEM NO.	LENGTH
	B1 - RED (P1)	B1 - P1			TB1-2	.30	YES		8.00
	B1 - YEL (P2)	B1 - P2			TB1-1				
	B1 - BLK (P3)	B1 - P3			TB1-1				
	B1 - YEL (S2)	B1 - S2			TB1-8				
	B1 - BLU (S4)	B1 - S4			TB1-10				8.00
SEE NOTE 14	B2 - RED (P1)	B2 - P1			TB1-3				5.25
	B2 - YEL (P2)	B2 - P2			TB1-1				
	B2 - BLK (P3)	B2 - P3			TB1-1				
	B2 - YEL (S2)	B2 - S2			TB1-4				
	B2 - BLU (S4)	B2 - S4			TB1-12				5.25
	AA-1 YEL	TB2-1	.30	YES	TB1-8			32	6.00
	AA-2 YEL	TB2-2	.30	YES	TB1-4	.30	YES	32	6.00
	B1 - RED (S1)	B1 - S1			TB1-9				8.00
	B1 - BLK (S3)	B1 - S3			TB1-5				8.00
SEE NOTE 14	B2 - RED (S1)	B2 - S1			TB1-7				5.25
	B2 - BLK (S3)	B2 - S3			TB1-6	.30	YES		5.25



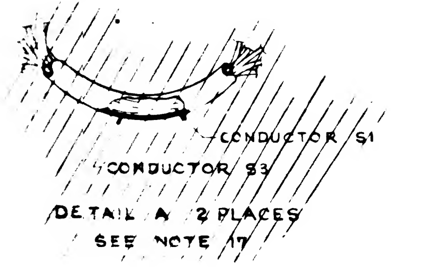
REVISIONS				
SYM	ZONE	DESCRIPTION	DATE	APPROVAL
		INITIAL CLASS A RELEASE TDRR NO. 13028		
A		REVISED PER TDRR 14598	8 DEC 64	JJJ
B		REVISED PER TDRR 15247	JAN 65	JWP EF

PICTORIAL VIEWS AND CONDUCTOR CHART SHOWN ON SHEET 1 ARE FOR THE -011 ASSEMBLY.

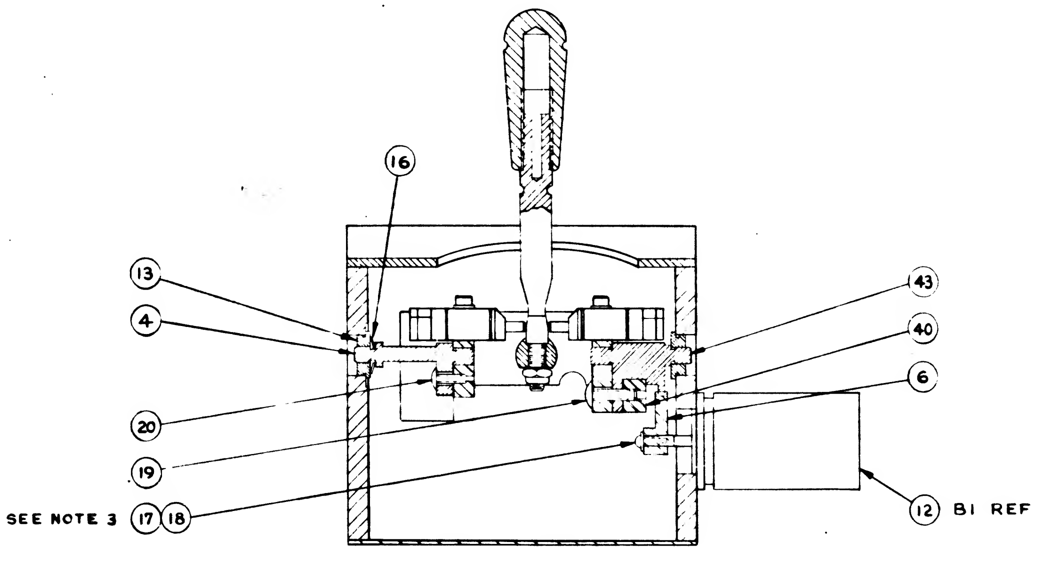




VIEW SHOWN WITH ITEMS ⑨ AND ⑪ REMOVED



DETAIL A 2 PLACES
SEE NOTE 17



PARTIAL SECTION A-A

			021	011	EFFECTIVITY	ITEM NO.	PART OR IDENTIFYING NO	NOMENCLATURE OR DESCRIPTION
			2			72	MS-35233-76	SCREW, MACHINE, PAN HD.
SEE NOTE 13			1			71	1010858-22	O-RING
SEE NOTE 13			1			70	1006783-18	SCREW, BUTTON HD SOC. HEX.
			1			69	1021704	SHAFT
			REF			68	1021782	WIRING DIAGRAM
			REF			67	1021783	SCHEMATIC DIAGRAM, ELEC.
			32			66	MS-35233-3	SCREW, MACHINE, PAN HD.
			1			65	1021769	RING, RETAINER
			1			64	1021752-011	DESICCATOR ASSY.
			1			63	1021773	GASKET
			1			62	1021760	COVER, RESOLVER
			1			61	1021771	PLATE, BOTTOM
			1			60	1021778	COVER
			1			59	1021780	GIMBAL ASSY-MATCHED MACH
			1			58	1021781	HOUSING ASSY-MATCHED MACH.
SEE NOTES 2&13			AR	AR		57	1012503	POLYURETHANE POTTING COMPOUND
~~SEE NOTE 13~~			-	~~AR~~		~~56~~	~~1010476-082~~	~~INSULATION SLEEVING~~
SEE NOTE 13			AR	AR		55	1010476-232	INSULATION SLEEVING
~~SEE NOTE 13~~			-	~~AR~~		~~54~~	~~1010476-172~~	~~INSULATION SLEEVING~~
			AR	AR		53	MIL-A-25457	ADHESIVE SILICONE RUBBER (ES-2531)
			2	2		52	1014695	PLUNGER ASSY, TRUNNION AXIS
SEE NOTE 13			4	4		51	1011625-11	SCREW, CAP, SOC HD
			AR	AR		50	MIL-S-22473	SEALING COMP, RETAINING, GRADE C
SEE NOTE 13			AR	AR		49	1010750	CURING AGENT, POLYAMIDE (ES-2760)
			AR	AR		48	1010749	FILLER, CALCIUM CARBONATE
			AR	AR		47	1010748	RESIN, EPOXY (ES-2779)
SEE NOTE 13			AR	AR		46	1010718	PRIMER, SILICONE ADHESIVE
			8	8		45	MS-15795-302	WASHER, FLAT
SEE NOTE 13			4	4		44	1011625-13	SCREW, CAP, SOC HD
			1	1		43	1014535	GEAR SECTOR, 55T FULL GEAR, 96P
			1	1		42	1014536	SHAFT, HANDLE
			2	2		41	1014694	SPRING PLUNGER ASSY, SHAFT AXIS
			1	1		40	1014533	CAM, SECTOR
SEE NOTE 13			1	1		39	1010617-4	NUT-HEX, SELF LOCKING
SEE NOTE 2			AR	AR		38	MIL-M-7866	MOLYBDENUM DISULFIDE POWDER
~~SEE NOTE 13~~			-	~~AR~~		~~37~~	~~1010476-082~~	~~INSULATION SLEEVING~~
SEE NOTE 13			AR	AR		36	1012507-004	TAPE, LACING
			AR	AR		35	QQ-S-571	SOLDER SN 10
			-	REF		34	1015074	WIRING DIAGRAM
			-	REF		33	1015075	SCHEMATIC DIAGRAM, ELEC.
SEE NOTE 13			AR	AR		32	1010789-001	WIRE, ELEC, TFE INSULATED, 24 AWG, YEL
			AR	AR		31	MIL-F-14256 QQ-S-571	FLUX (ES-2798) FLUX-TYPE AR (ES-2175 TYPE 2)
			AR	AR		30	QQ-S-571	SOLDER SN60 (ES-2175, ALLOY 1)
SEE NOTE 13			-	2		29	1010618-13	SCREW, BUTTON HD, SELF LKG, SOC HEX
			1	2		28	1011918-1	WASHER, CABLE CLAMP
			-	1		27	1000220-7	CLAMP, CABLE
			2	2		26	1010316	CAPACITOR, FIXED
			1	1		25	1000220-2	CLAMP, CABLE
SEE NOTE 13			AR	AR		24	1006776-11	INSULATION, SLEEVING ELEC
			1	1		23	1021718-011	COMPONENT BOARD ASSY
SEE NOTE 13			-	6		22	1010618-1	SCREW, BUTTON HD, SELF LKG, SOC HEX
			-	8		21	1010628-1	SCREW, FLAT HD, SELF LKG, SOC HEX
			1	7		20	1010618-2	SCREW, BUTTON HD, SELF LKG, SOC HEX
SEE NOTE 13			1	1		19	1010618-15	SCREW, BUTTON HD, SELF LKG, SOC HEX
			3	3		18	MS-15795-701	WASHER-FLAT
SEE NOTE 13			3	3		17	1006783-1	SCREW, BUTTON HD, SOC HEX
SEE NOTE 13			1	1		16	1010608-1	WASHER-SPRING, CURVED
			6	6		15	NAS 1352 C04 LL 4	SCREW, CAP HD, SELF LKG, SOC HEX
SEE NOTE 13			6	6		14	1010415-1	CLAMP-SYNCHRO MOUNTING
SEE NOTE 13			4	4		13	1010418-000	BUSHING-FLANGED
SEE NOTE 13			2	2		12	1010429	SYNCHRO RESOLVER
			1	1		11	1014512	DIAPHRAGM-HAND CONTROLLER
			-	1		10	1014563	PLATE BOTTOM
			-	1		9	1014538	COVER ASSY, (INSEP)
			1	1		8	1014575	HANDLE
			-	1		7	1014570	SHAFT
			2	2		6	1014573	GEAR, SECTOR 72 T FULL GEAR, 96P
			1	1		5	1014571	GEAR, SECTOR, 55 T FULL GEAR, 96P
			1	1		4	1021719	SHAFT
			1	1		3	1014564	TERMINAL BOARD ASSY (INSEP)
			-	1		2	1014567	GIMBAL ASSY-MATCHED MACH.
			-	1		1	1014701	HOUSING ASSY-MATCHED MACH.
	QUANTITY REQUIRED						LIST OF MATERIALS	

NEXT ASSY	USED ON	APPLICABLE DASH NO.
1014664-011	1014664-011	-021
1015053-011	1015053-011	-011
APPLICATION		

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± ~ DECIMALS .005 ±.02 ANGLES ± ~
DO NOT SCALE THIS DRAWING
MATERIAL ~
HEAT TREATMENT ~
FINAL FINISH ~
CONTRACT NAS9-497

SIGNATURES		DATE
DRAWN	P. Booth III	18 SEPT 64
CHECKED	J. Tetrang	23 SEPT 64
DESIGNER	E. Metz	23 SEPT 64
ENGINEER	J. Sloan	9 23 64
MIT APPROVAL	W. Copper	29 Sep 64
NASA APPROVAL	W. Rhine	9-29-64

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

SEXTANT HAND CONTROLLER ASSEMBLY

CODE IDEN NO
SIZE J
NASA DRAWING NO 1021700
SCALE 2/1
WT
SHEET 1 OF 2

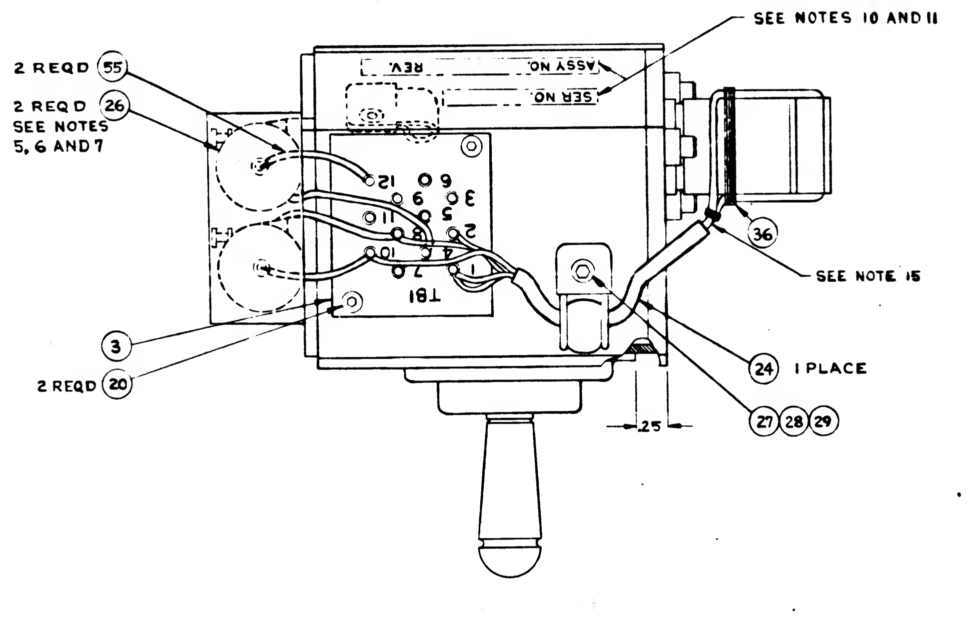
NOTES:

1. INTERPRET DWG IN ACCORDANCE WITH STD PRESCRIBED BY MIL-D-70327.
2. ASSEMBLE AND MOISTURE PROOF PER ATP 1021700.
3. SECURE ITEM ⑧, AND ITEM ⑰, USING ITEM ㊿, PER ND 1002211.
4. BOND ITEM ⑪ TO ITEM ⑨ OR (60) AND TO ITEM ㊷ PER ND 1002151, USING ITEM (53) ¢ ㊻.
5. SOLDER PER ND 1002071, USING ITEM ㉚ AND ㉛
6. BOND PER ND 1002203, USING ITEMS ㊼, ㊽ AND ㊾.
7. SELECT FROM 1010316-24 THRU -27.
8. EDGE OF DIAPHRAGM TO BE .315 ± .015 FROM LINE OF CENTER OF MOUNTING HOLES AS SHOWN.
9. INSPECT PER PS 1021700
10. IDENTIFY USING DWG NO. APPLICABLE DASH NO. AND REV LETTER PER ND 1002019.
11. SERIALIZE PER ND 1002023.
12. BONDING MATERIAL NOT TO EXCEED THIS AREA.
13. VENDOR ITEM: SEE SPEC CONTROL DWG.
14. SOLDER ALL LEADS ON UNDERSIDE OF TB1 USING ITEMS ㉟ AND ㉛.
15. SPOT TIE RESOLVER WIRES TO RESOLVER BODY, AND SPOT TIE RESOLVER WIRES TOGETHER AS NECESSARY, USING ITEM ㊱.
16. ~~DO NOT SHRINK UNTIL NEXT ASSY.~~
17. ~~CLIP CONDUCTORS S1 4.00 LONG AND S3 3.50 LONG (ITEM ⑫) RESOLVER, PUSH INSULATION BACK .37 AND CLIP WIRES. PULL INSULATION OVER CLIPPED ENDS.~~
18. ALL SCREWS AND THREADS NOT SECURED BY LOCKING DEVICES, SHALL BE SECURED USING ITEM ㊿ PER ND 1002211.
19. ~~MARK CONDUCTOR IDENTIFICATION PER ND 1002019 (ES-2475-7).~~
20. APPLY ITEM ㊿ PER ND 1002211, TO ITEM (72) AFTER COMPLETION OF ATP 1021700.

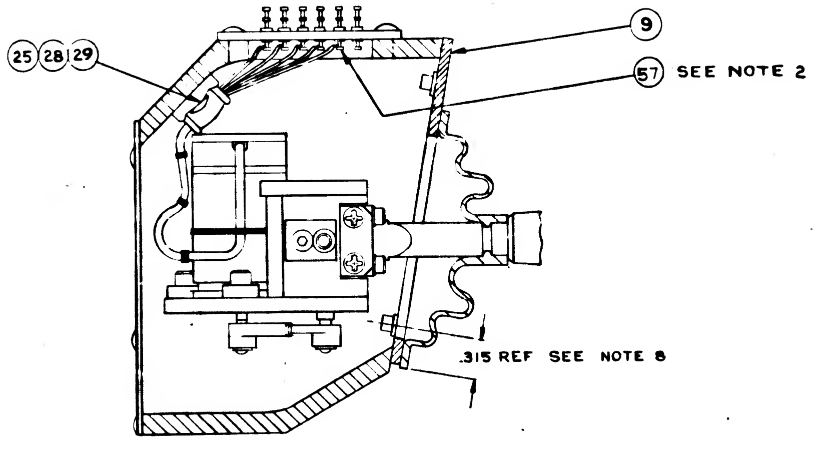
SEE NOTE 14 (B2 - RED (P1) through B2 - BLU (S4))

SEE NOTE 14 (B2 - RED (S1) and B2 - BLK (S3))

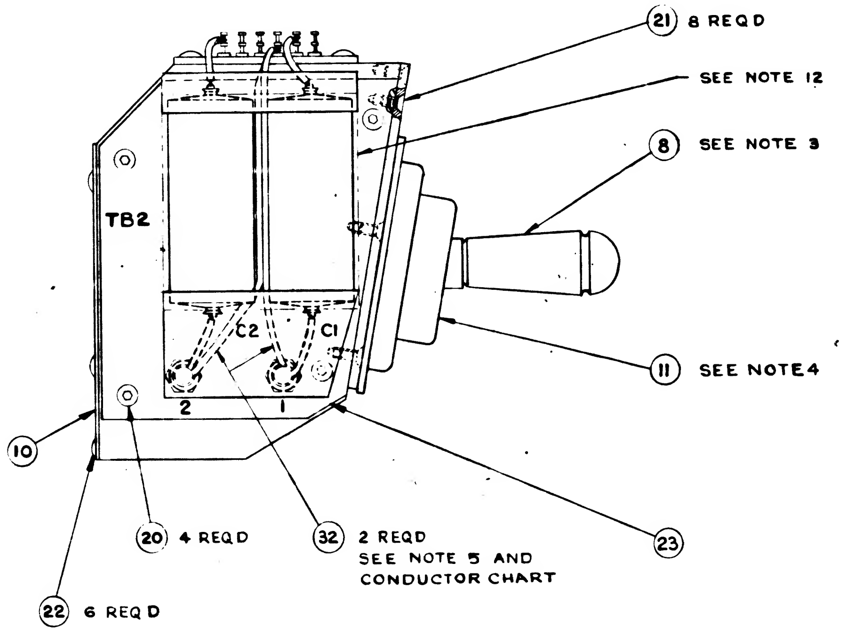
CONDUCTOR	FROM	STRIP	TIN	TO	STRIP	TIN	ITEM NO.	LENGTH
B1 - RED (P1)	B1 - P1			TB1-2	.30	YES		8.00
B1 - YEL (P2)	B1 - P2			TB1-1				
B1 - BLK (P3)	B1 - P3			TB1-1				
B1 - YEL (S2)	B1 - S2			TB1-8				
B1 - BLU (S4)	B1 - S4			TB1-10				8.00
B2 - RED (P1)	B2 - P1			TB1-3				5.25
B2 - YEL (P2)	B2 - P2			TB1-1				
B2 - BLK (P3)	B2 - P3			TB1-1				
B2 - YEL (S2)	B2 - S2			TB1-4				
B2 - BLU (S4)	B2 - S4			TB1-12				5.25
AA-1 YEL	TB2-1	.30	YES	TB1-8			32	6.00
AA-2 YEL	TB2-2	.30	YES	TB1-4	.30	YES	32	6.00
B1 - RED (S1)	B1 - S1			TB1-9				8.00
B1 - BLK (S3)	B1 - S3			TB1-5				8.00
B2 - RED (S1)	B2 - S1			TB1-7				5.25
B2 - BLK (S3)	B2 - S3			TB1-6	.30	YES		5.25

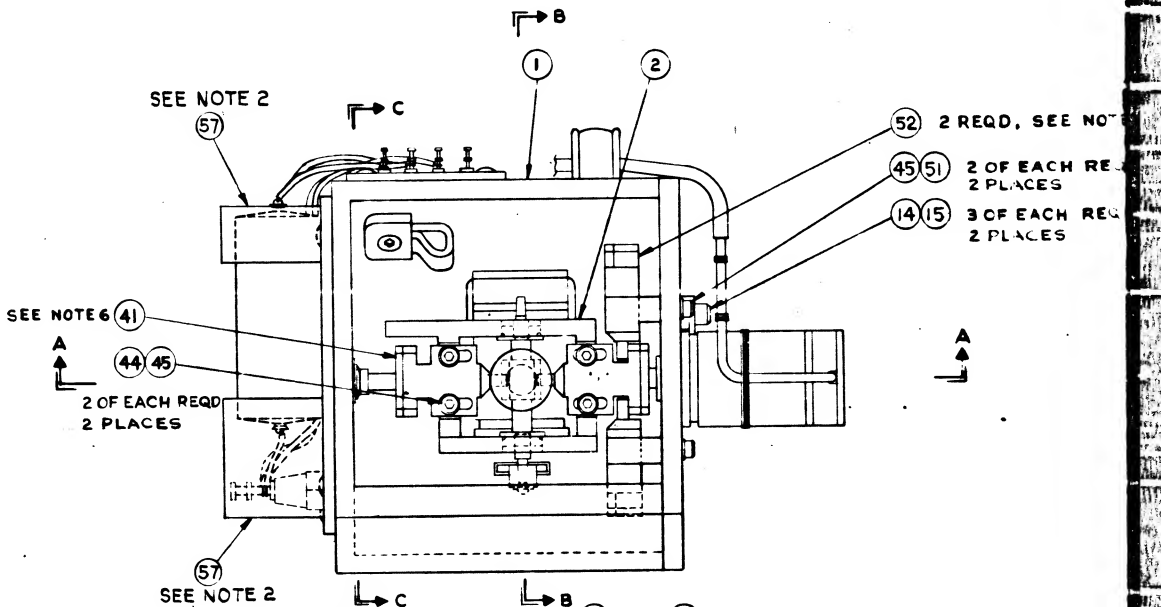


PICTORIAL VIEWS AND CONDUCTOR CHART SHOWN ON SHEET 1 ARE FOR THE -011 ASSEMBLY.

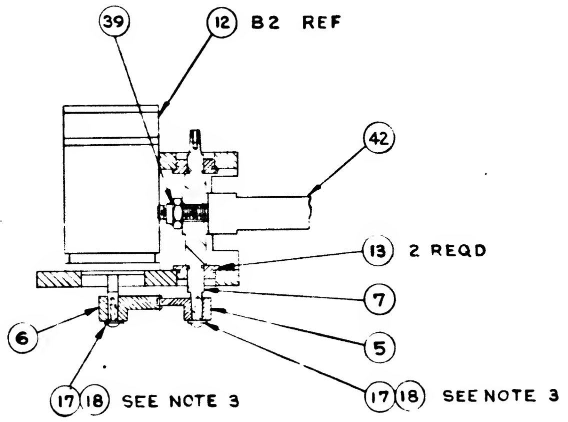


PARTIAL SECTION C-C

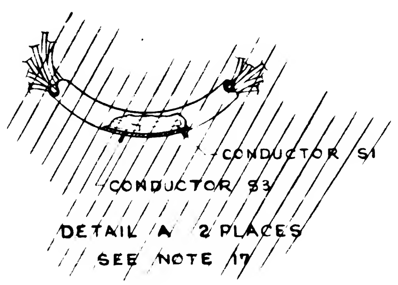



B
C
1
2
SEE NOTE 2 57
52 2 REQD, SEE NO
45 51 2 OF EACH RE 2 PLACES
14 15 3 OF EACH REQ 2 PLACES
SEE NOTE 6 41
44 45 2 OF EACH REQD 2 PLACES
A
A
57 SEE NOTE 2
C
B

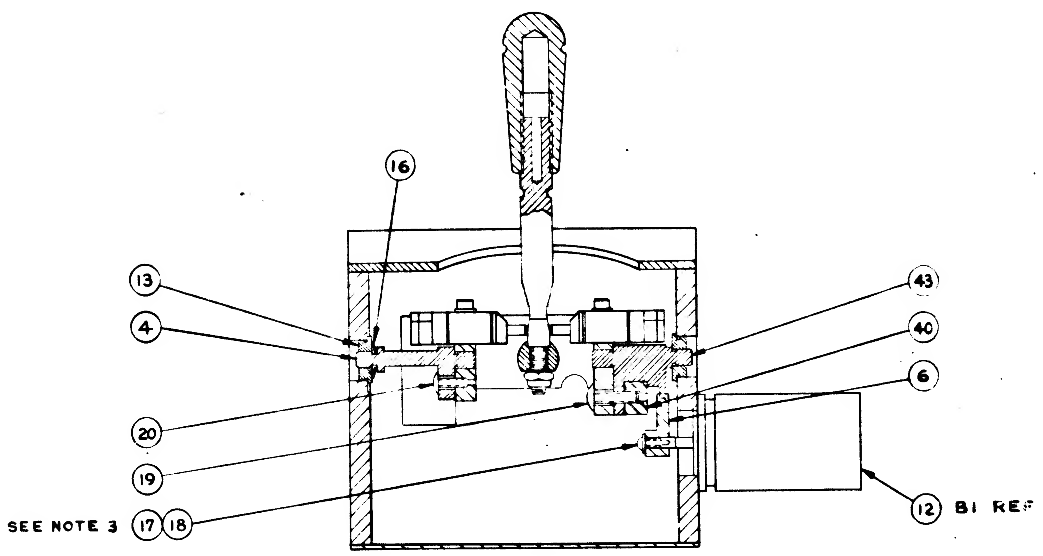
VIEW SHOWN WITH ITEMS ⑨ AND ⑪ REMOVED



PARTIAL SECTION B-B



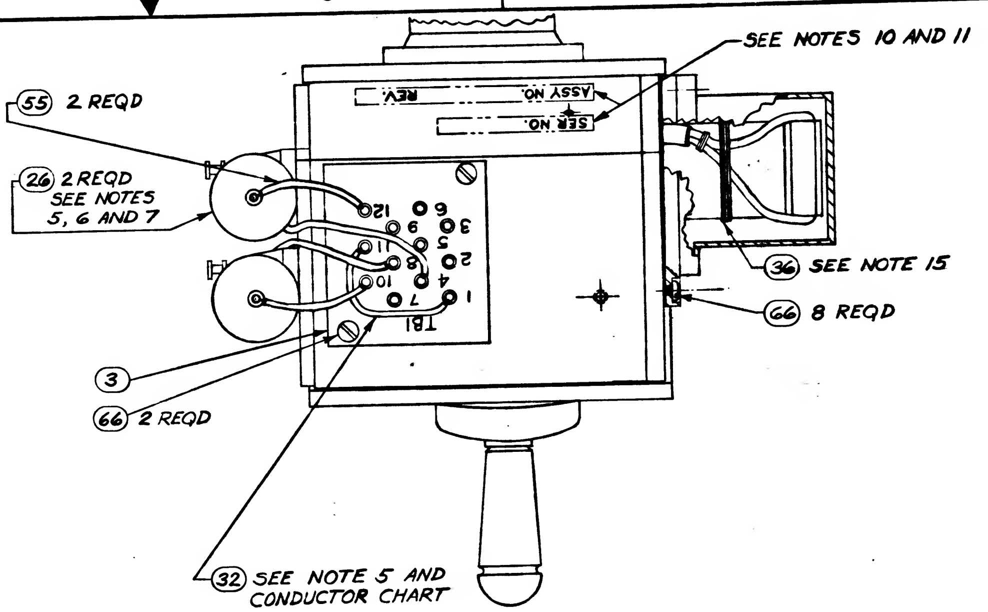
DETAIL A 2 PLACES
SEE NOTE 17

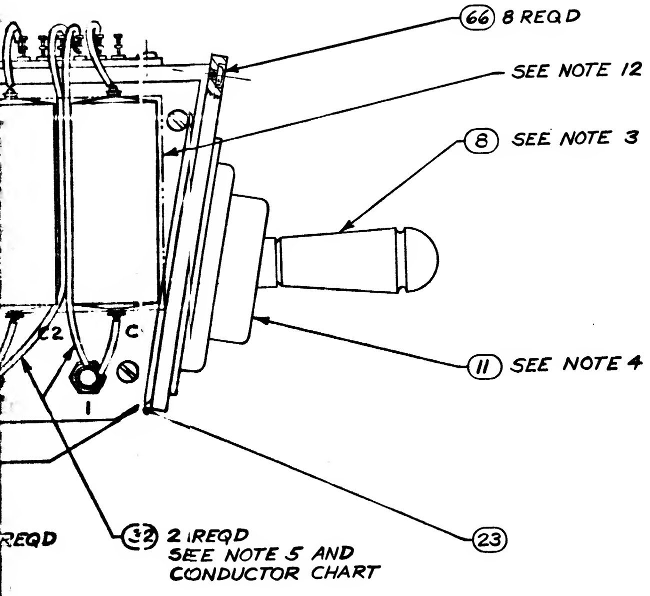


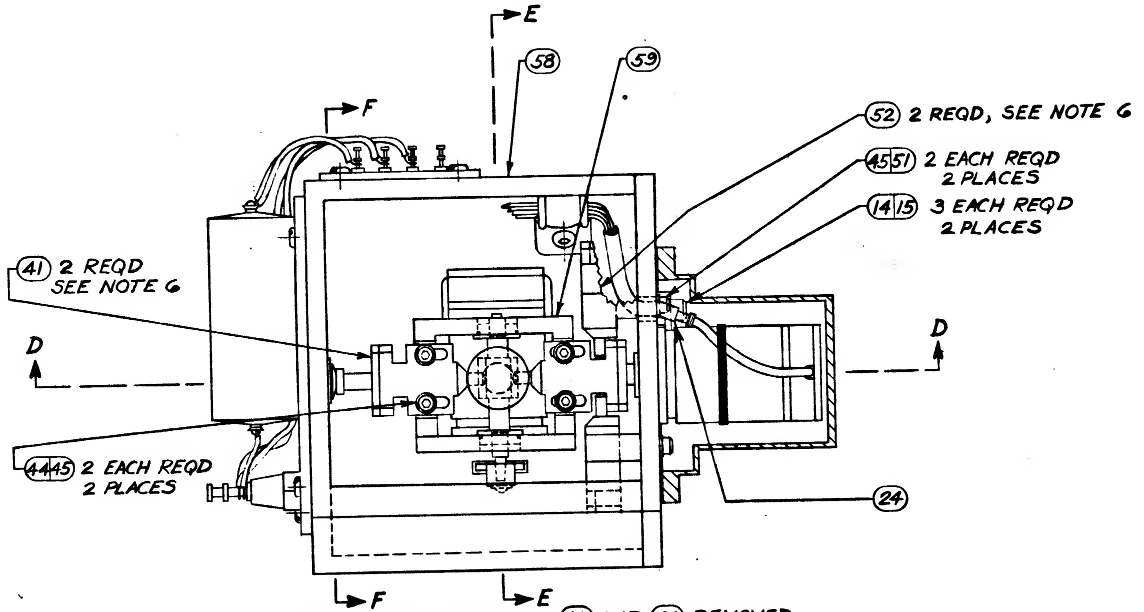
PARTIAL SECTION A-A

REVISIONS					
SYM	ZONE	DESCRIPTION	CHG. NO.	DATE	APPD
B		ADDED SH. 2 PER TDRR 15247		5 Jan 65	

CONDUCTOR	FROM	STRIP	TIN	TO	STRIP	TIN	ITEM NO.	LENGTH
-RED (P1)	B1-P1			TB1-2	.30	YES		5.50
-YEL (P2)	B1-P2			TB1-1				
-BLK (P3)	B1-P3			TB1-1				
-YEL (S2)	B1-S2			TB1-8				
-BL (S4)	B -S4			TB1-10				
-RED (P)	B2-P1			TB1-3				6.25
-YEL (P2)	B2-P2			TB -11				
(P3)	B2-P3			TB1-11				
-YEL (S2)	B2-S2			TB1-4				
-B (S4)	B2-S4			TB1-12				
YEL	B2-1	.30	YES	TB -8			32	4.25
YEL	B2-2	.30	YES	TB -4			32	4.25
-RED (S)	B -S			TB -9				5.50
-BLK (S3)	B -S3			TB1-5				5.50
(S)	B2-S			TB1-7				6.25
(S3)	B2-S3			TB1-6				6.25
YEL	TB -	.30	YES	TB1-11			32	2.00

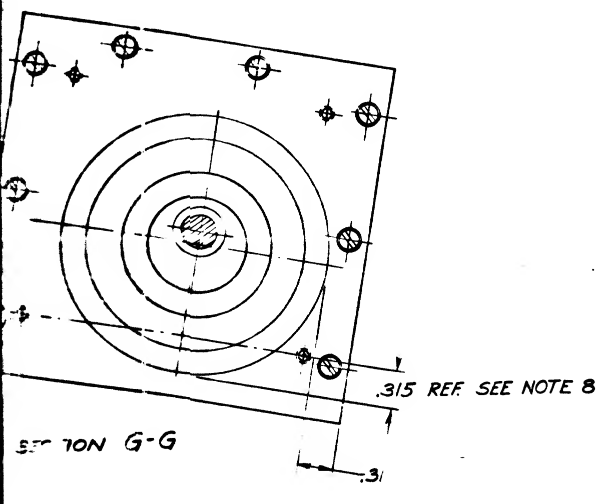




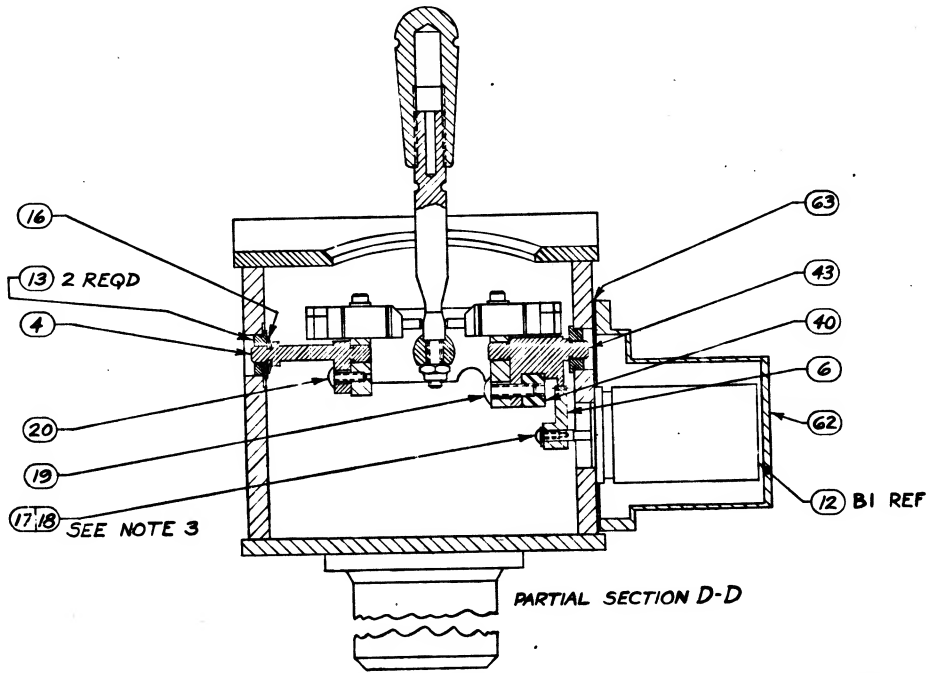

E
F
(58)
(59)
(52) 2 REQD, SEE NOTE 6
(45)(51) 2 EACH REQD 2 PLACES
(14)(15) 3 EACH REQD 2 PLACES
(41) 2 REQD SEE NOTE 6
D
D
(44)(45) 2 EACH REQD 2 PLACES
(24)
F
E

VIEW SHOWN WITH ITEMS (11) AND (60) REMOVED

NOTE: PICTORIAL VIEWS AND CONDUCTOR CHART SHOWN ON SHEET 2 ARE FOR THE -021 ASSEMBLY.



SECTION G-G



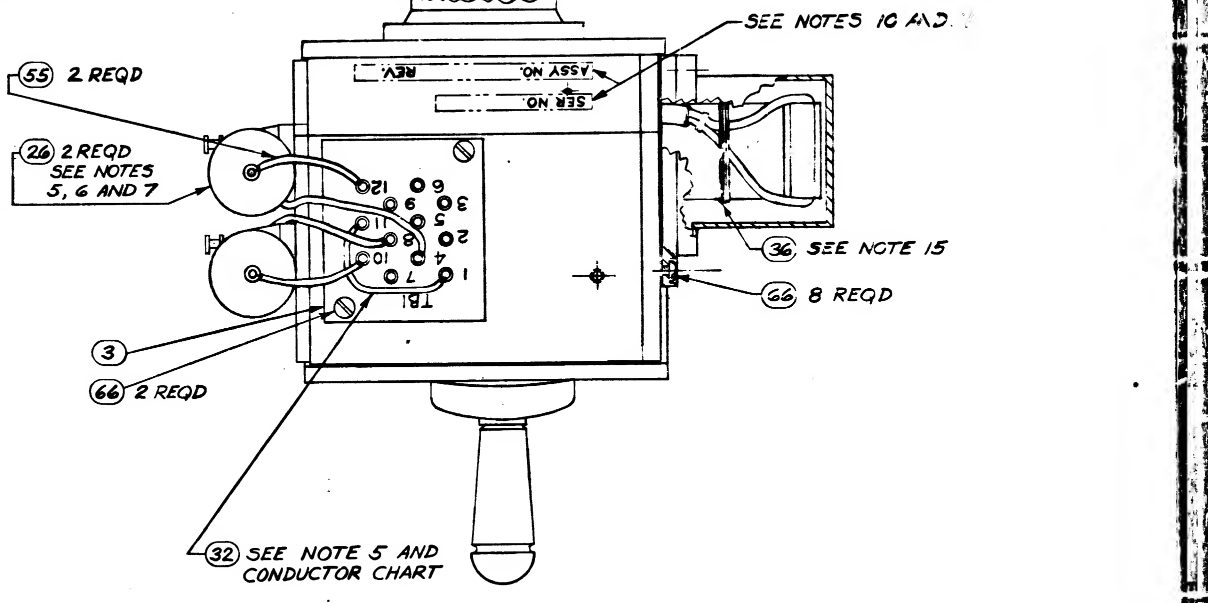
PARTIAL SECTION D-D

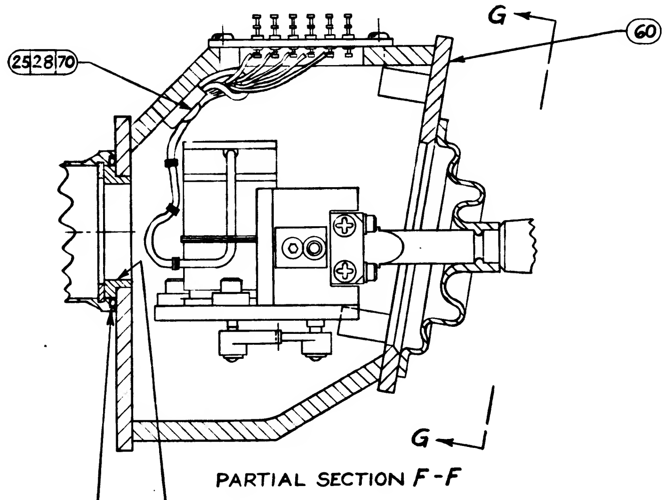
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ON FRACTIONS ± — DECIMALS +.02 -.02 ANGLES ± —	AC SPARK PLUG DIVISION, GMC MILWAUKEE, WISCONSIN	MANNED SPACECRAFT CENTER HOUSTON, TEXAS
DO NOT SCALE THIS DRAWING	ACSP PN	SEXTANT HAND CONTROLLER ASSEMBLY
	DRAWN F. R. Jones DATE 18 DEC 64 CHECKED Fasken 28 DEC 64 APPROVAL Earl Mertz 28 DEC 64 APPROVAL K. Kepper 28 DEC 64	
MATERIAL —	NASA APPROVAL W. J. Atkins 1-5-65	CODE IDENT NO. SIZE J 1021700
CONTRACT NAS 9-497	MIT APPROVAL W. Kupfer 5 Jan 65	SCALE 2/1 SHEET 2 OF 2

SEE NOTE 14 (B1-RED (P1) to B2-BLU (S4))

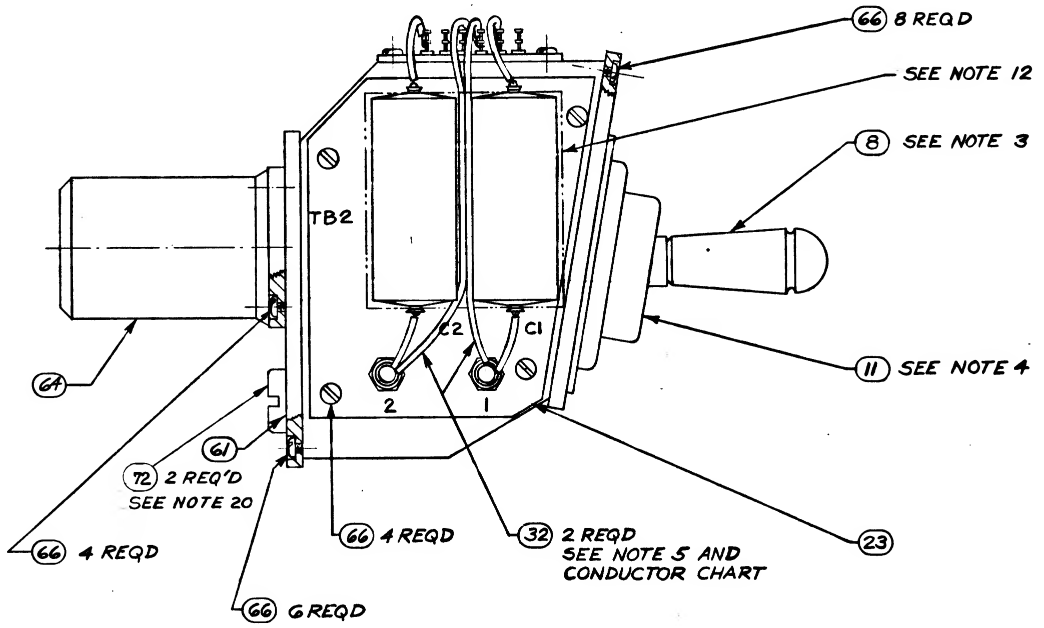
SEE NOTE 14 (B1-RED (S1) to B2-BLK (S3))

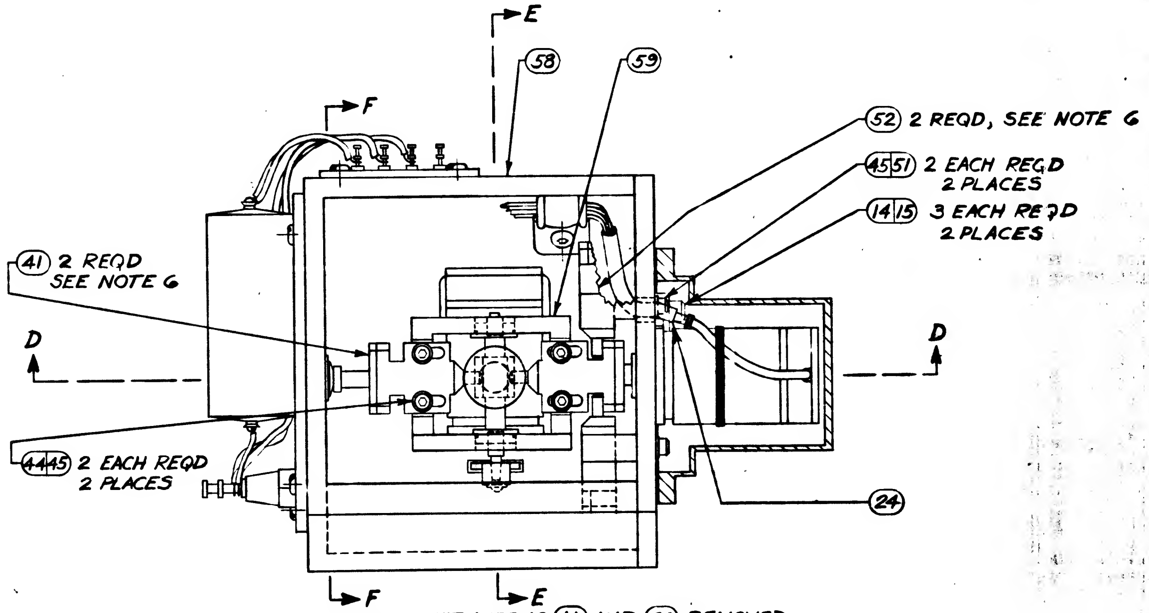
CONDUCTOR	FROM	STRIP	TIN	TO	STRIP	TIN	ITEM NO.	LENGTH
B1 - RED (P1)	B1 - P1			TB1-2	.30	YES		5.50
B1 - YEL (P2)	B1 - P2			TB1-1				
B1 - BLK (P3)	B1 - P3			TB1-1				
B1 - YEL (S2)	B1 - S2			TB1-8				
B1 - BLU (S4)	B1 - S4			TB1-10				↓
B2 - RED (P1)	B2 - P1			TB1-3				6.25
B2 - YEL (P2)	B2 - P2			TB1-11				
B2 - BLK (P3)	B2 - P3			TB1-11				
B2 - YEL (S2)	B2 - S2			TB1-4				
B2 - BLU (S4)	B2 - S4			TB1-12				↓
AA-1 YEL	TB2-1	.30	YES	TB1-8			32	4.25
AA-2 YEL	TB2-2	.30	YES	TB1-4			32	4.25
B1-RED (S1)	B1-S1			TB1-9				5.50
B1-BLK (S3)	B1-S3			TB1-5				5.50
B2-RED (S1)	B2-S1			TB1-7				6.25
B2-BLK (S3)	B2-S3			TB1-6				6.25
AA-3 YEL	TB1-1	.30	YES	TB1-11	↓	↓	32	2.00





PARTIAL SECTION F-F

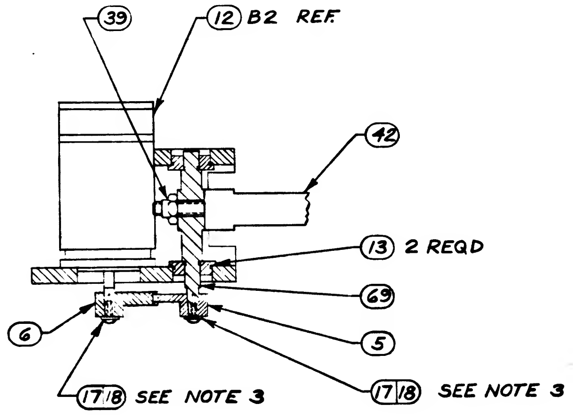




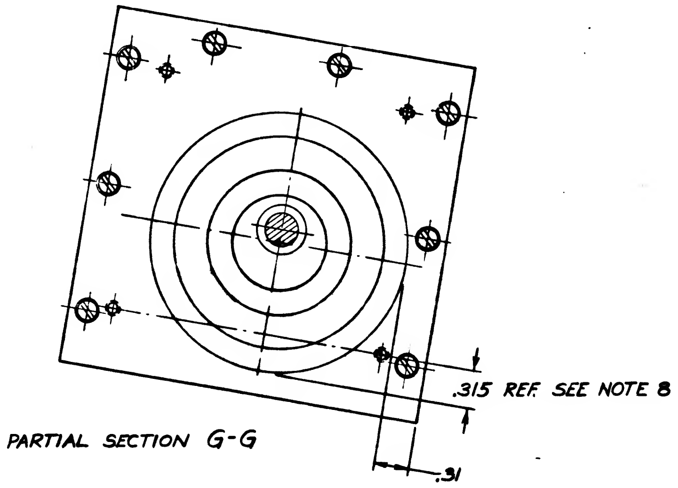
E
F
(58)
(59)
(52) 2 REQD, SEE NOTE 6
(45)(51) 2 EACH REQD 2 PLACES
(14)(15) 3 EACH REQD 2 PLACES
(41) 2 REQD SEE NOTE 6
D
D
(44)(45) 2 EACH REQD 2 PLACES
(24)
F
E

VIEW SHOWN WITH ITEMS (11) AND (60) REMOVED

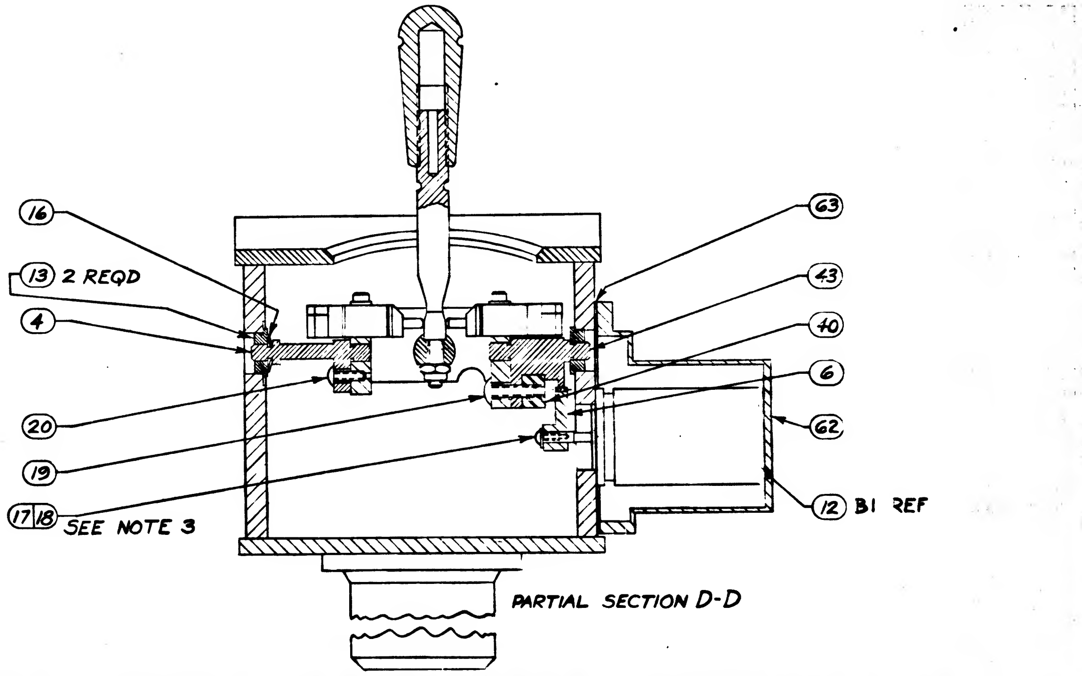
NOTE: PICTORIAL VIEWS AND ON SHEET 2 ARE F



PARTIAL SECTION E-E



PARTIAL SECTION G-G

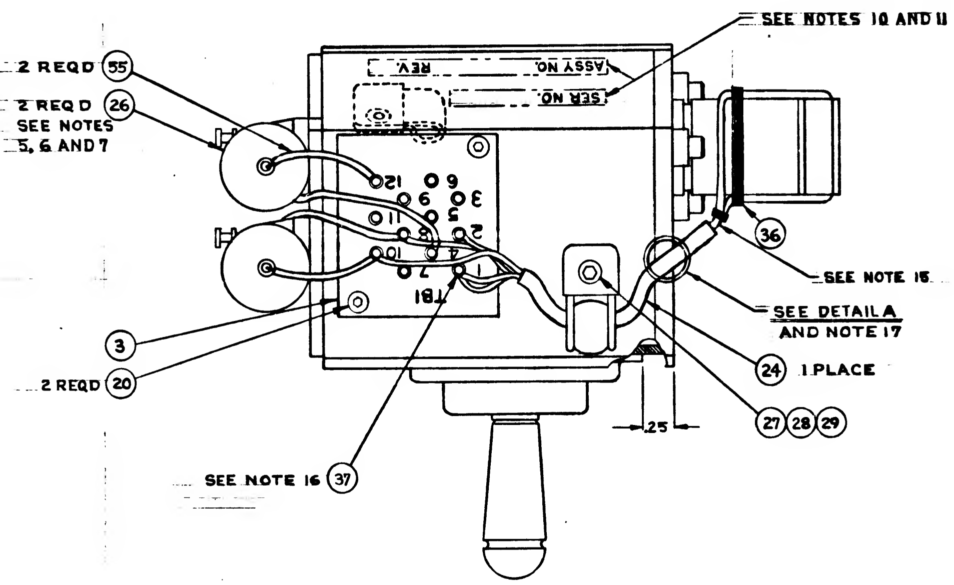


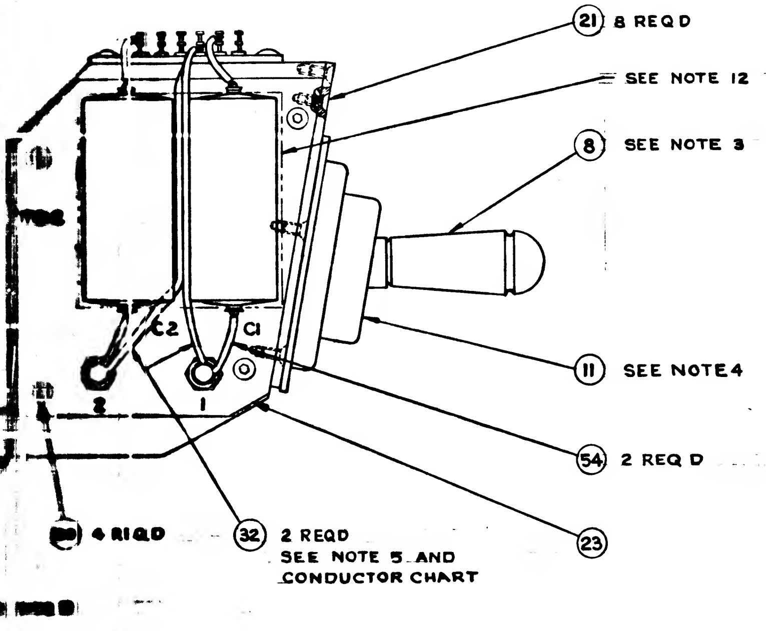
PARTIAL SECTION D-D

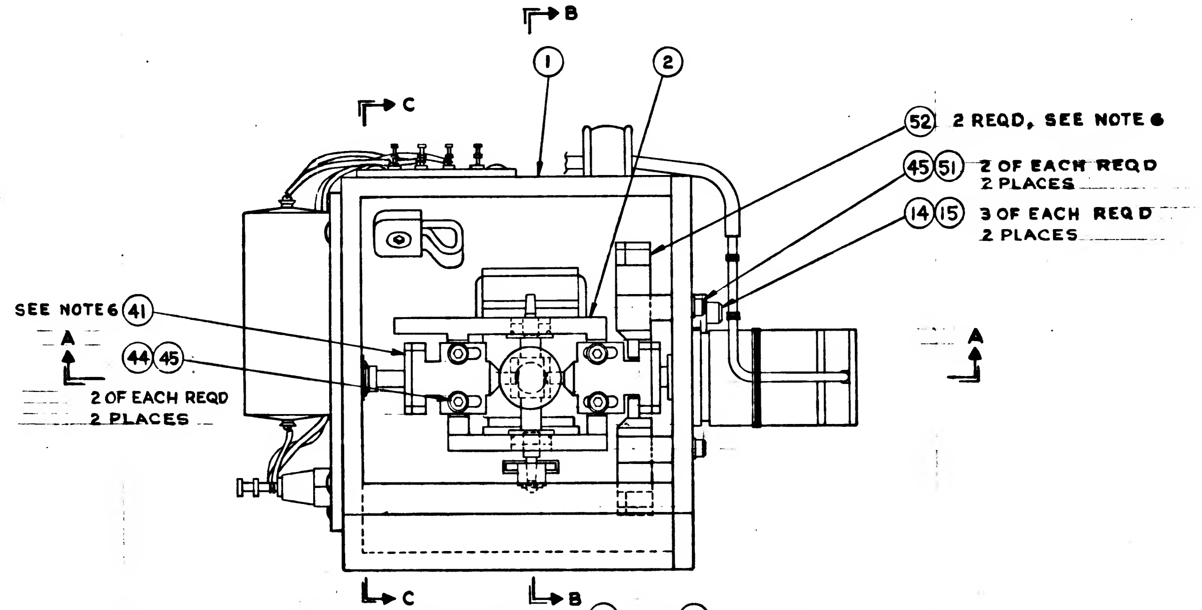
1021700

REVISIONS				
SYM	ZONE	DESCRIPTION	DATE	APPROVAL
		INITIAL CLASS A RELEASE TORR NO. 13028		

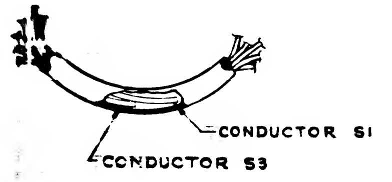
	CONDUCTOR	FROM	STRIP	TIN	TO	STRIP	TIN	ITEM NO.	LENGTH
	B1 - RED (P1)	B1 - P1			TB1-2	.30	YES		8.00
	B1 - YEL (P2)	B1 - P2			TB1-1				
	B1 - BLK (P3)	B1 - P3			TB1-1				
	B1 - YEL (S2)	B1 - S2			TB1-8				
	B1 - BLU (S4)	B1 - S4			TB1-C				8.00
SEE NOTE 4	B2 - RED (P1)	B2 - P1			TB1-3				5.25
SEE NOTE 4	B2 - YEL (P2)	B2 - P2			TB1-1				
SEE NOTE 4	B2 - BLK (P3)	B2 - P3			TB1-1				
SEE NOTE 4	B2 - YEL (S2)	B2 - S2			TB1-4				
SEE NOTE 4	B2 - BLU (S4)	B2 - S4			TB1-2				5.25
SEE NOTE 5	AA-1 YEL	TB2-1	.30	YES	TB1-8			32	6.00
SEE NOTE 5	AA-2 YEL	TB2-2	.30	YES	TB1-4	.30	YES	32	6.00



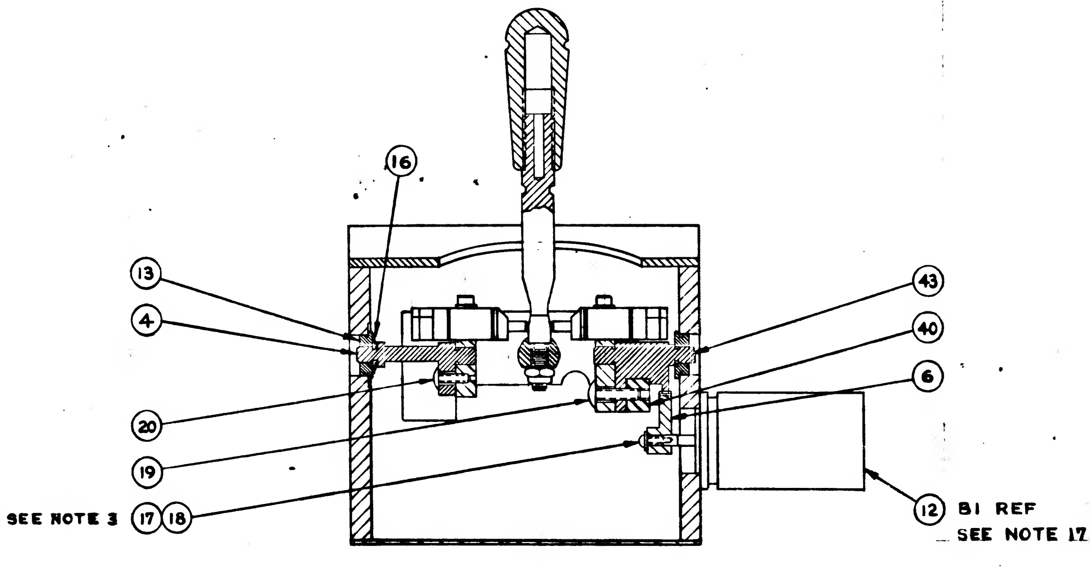



B
C
(1)
(2)
(52) 2 REQD, SEE NOTE 6
(45)(51) 2 OF EACH REQD 2 PLACES
(14)(15) 3 OF EACH REQD 2 PLACES
SEE NOTE 6 (41)
(44)(45) 2 OF EACH REQD 2 PLACES
A
A
C
B

VIEW SHOWN WITH ITEMS (9) AND (11) REMOVED



DETAIL A 2 PLACES
SEE NOTE 17



PARTIAL SECTION A-A

				011	EFFECTIVITY	ITEM NO.	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION
SEE NOTE 13				AR		56	1010476-052	INSULATION SLEEVING
SEE NOTE 13				AR		55	1010476-232	INSULATION SLEEVING
SEE NOTE 13				AR		54	1010476-172	INSULATION SLEEVING
				AR		53	MIL-A-25457	ADHESIVE-SILICONE RUBBER(ES-2831)
				2		52	1014695	PLUNGER ASSY, TRUNNION AXIS
SEE NOTE 13				4		51	1011625-11	SCREW, CAP, SOC HD
				AR		50	MIL-S-22473	SEALING COMP, RETAINING, GRADE C
SEE NOTE 13				AR		49	1010750	CURING AGENT, POLYAMIDE(ES-2760)
				AR		48	1010749	FILLER, CALCIUM CARBONATE
				AR		47	1010748	RESIN, EPOXY (ES-2779)
SEE NOTE 13				AR		46	1010718	PRIMER, SILICONE ADHESIVE
				8		45	MS-15795-302	WASHER, FLAT
SEE NOTE 13				4		44	1011625-13	SCREW, CAP, SOC HD
				1		43	1014535	GEAR SECTOR, 55T FULL GEAR, 96P
				1		42	1014536	SHAFT, HANDLE
				2		41	1014694	SPRING PLUNGER ASSY, SHAFT AXIS
				1		40	1014533	CAM, SECTOR
SEE NOTE 13				1		39	1010617-4	NUT-HEX, SELF LOCKING
SEE NOTE 2				AR		38	MIL-M-7866	MOLYBDENUM DISULFIDE POWDER
SEE NOTE 13				AR		37	1010476-082	INSULATION SLEEVING
SEE NOTE 13				AR		36	1012507-004	TAPE, LACING
				AR		35	QQ-S-571	SOLDER SN 60
				REF		34	1015074	WIRING DIAGRAM
				REF		33	1015075	SCHEMATIC DIAGRAM, ELEC.
SEE NOTE 13				AR		32	1010789-001	WIRE, ELEC, TFE INSULATED, 24 AWG, YEL
				AR		31	MIL-F-14256 QQ-S-571	FLUX (ES-2798) FLUX-TYPE AR (ES-2175 TYPE 2)
				AR		30	QQ-S-571	SOLDER SN60 (ES-2175, ALLOY 1)
SEE NOTE 13				2		29	1010618-13	SCREW, BUTTON HD, SELF LKG, SOC HEX
				2		28	1011918-1	WASHER, CABLE CLAMP
				1		27	1000220-7	CLAMP, CABLE
				2		26	1010316	CAPACITOR, FIXED
				1		25	1000220-2	CLAMP, CABLE
SEE NOTE 13				AR		24	1006776-11	INSULATION, SLEEVING ELEC
				1		23	1021718-011	COMPONENT BOARD ASSY
SEE NOTE 13				6		22	1010618-1	SCREW, BUTTON HD, SELF LKG, SOC HEX
				8		21	1010628-1	SCREW, FLAT HD, SELF LKG, SOC HEX
				7		20	1010618-2	SCREW, BUTTON HD, SELF LKG, SOC HEX
SEE NOTE 13				1		19	1010618-15	SCREW, BUTTON HD, SELF LKG, SOC HEX
				3		18	MS-15795-701	WASHER-FLAT
SEE NOTE 13				3		17	1006783-1	SCREW, BUTTON HD, SOC HEX
SEE NOTE 13				1		16	1010608-1	WASHER-SPRING, CURVED
				6		15	NAS 1352 C04 LL 4	SCREW, CAP HD, SELF LKG, SOC HEX
SEE NOTE 13				6		14	1010415-1	CLAMP-SYNCHRO MOUNTING
SEE NOTE 13				4		13	1010418-000	BUSHING-FLANGED
SEE NOTE 13				2		12	1010429	SYNCHRO RESOLVER
				1		11	1014512	DIAPHRAGM-HAND CONTROLLER
				1		10	1014563	PLATE BOTTOM
				1		9	1014538	COVER ASSY, (INSEP)
				1		8	1014575	HANDLE
				1		7	1014570	SHAFT
				2		6	1014573	GEAR, SECTOR 72 T FULL GEAR, 96P
				1		5	1014571	GEAR, SECTOR, 55T FULL GEAR, 96P
				1		4	1021719	SHAFT
				1		3	1014564	TERMINAL BOARD ASSY (INSEP)
				1		2	1014567	GIMBAL ASSY-MATCHED MACH.
				1		1	1014701	HOUSING ASSY-MATCHED MACH.
QUANTITY REQUIRED								LIST OF MATERIALS

1015053-011	1015053-011	-011	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ON FRACTIONS ± ~ DECIMALS ±.005 ±.02 ANGLES ± ~ DO NOT SCALE THIS DRAWING MATERIAL ~ HEAT TREATMENT ~ FINAL FINISH ~	
NEXT ASSY	USED ON	APPLICABLE DASH NO.	CONTRACT NAS9-497	
APPLICATION				

SIGNATURES		DATE
DRAWN		10 SEPT 64
CHECKED		23 SEPT 64
DESIGNER	E Metz	23 SEPT 64
ENGINEER		9-23-64
MIT APPROVAL	W [illegible]	29 Sep 64
NASA APPROVAL	W J [illegible]	9-28-64

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

SEXTANT HAND CONTROLLER ASSEMBLY

CODE IDENT NO.	SIZE	NASA DRAWING NO.
	J	1021700
SCALE 2/1	WT	SHEET 1 OF 1

1021700

2H

MASTER

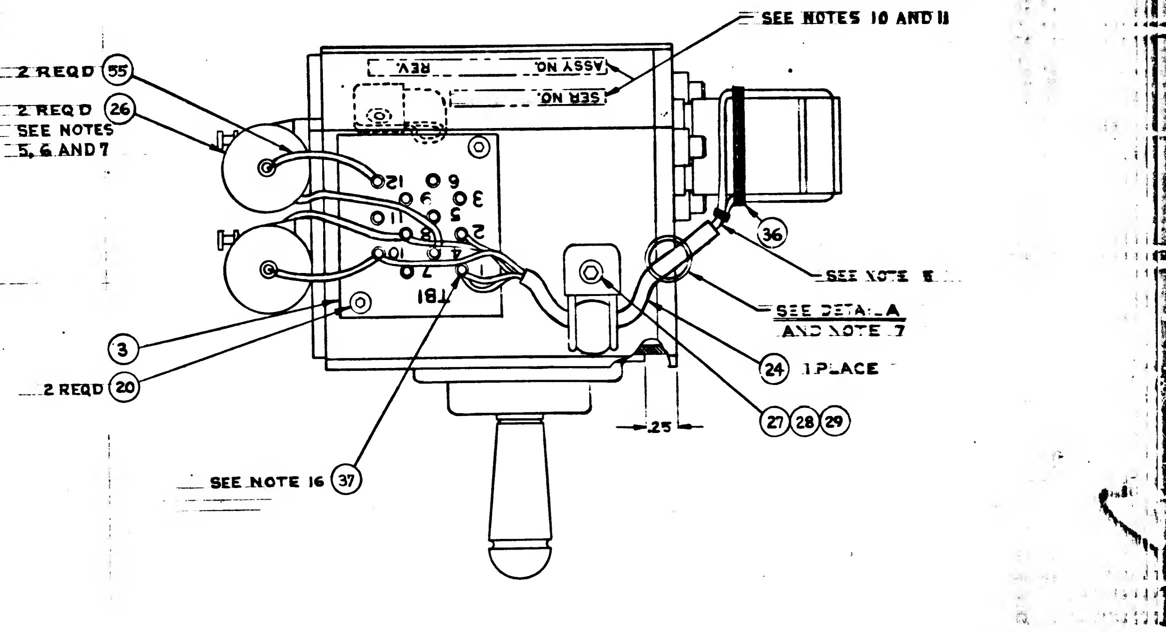
NOTES:

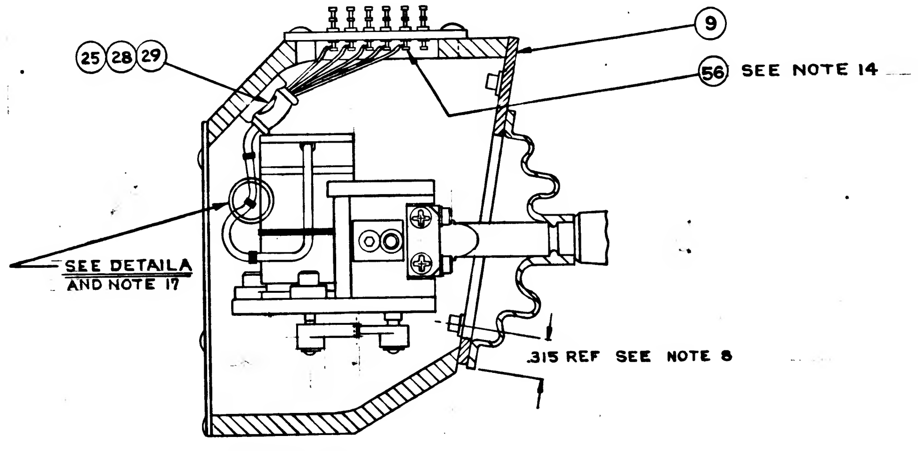
1. INTERPRET DWG IN ACCORDANCE WITH STD PRESCRIBED BY MIL-D-70327.
2. ASSEMBLE AND TEST PER ATP-1021700.
3. SECURE ITEM ⑧, AND ITEM ⑰, USING ITEM ㊿, PER ND 1002211.
4. BOND ITEM ⑪ TO ITEM ⑨ PER ND 1002151, USING ITEM ㊽ AND ㊻.
5. SOLDER PER ND 1002071, USING ITEM ㉚ AND ㉛.
6. BOND PER ND 1002203, USING ITEMS ㊼, ㊽ AND ㊾.
7. SELECT FROM 1010316-24 THRU -27.
8. EDGE OF DIAPHRAGM TO BE .315±.015 FROM LINE OF CENTER OF MOUNTING HOLES AS SHOWN.
9. INSPECT PER PS 1021700
10. IDENTIFY USING DWG NO. APPLICABLE DASH NO. AND REV LETTER PER ND 1002019.
11. SERIALIZE PER ND 1002023.
12. BONDING MATERIAL NOT TO EXCEED THIS AREA.
13. VENDOR ITEM: SEE SPEC CONTROL DWG.
14. SOLDER ALL LEADS ON UNDERSIDE OF TB1 USING ITEMS ㉟ AND ㉛.
15. SPOT TIE RESOLVER WIRES TO RESOLVER BODY, AND SPOT TIE RESOLVER WIRES TOGETHER AS NECESSARY, USING ITEM ㊱.
16. DO NOT SHRINK UNTIL NEXT ASSY.
17. CLIP CONDUCTORS S1 4.00 LONG AND S3 3.50 LONG (ITEM ⑫) RESOLVER. PUSH INSULATION BACK .37 AND CLIP WIRES. PULL INSULATION OVER CLIPPED ENDS.
18. ALL SCREWS AND THREADS NOT SECURED BY LOCKING DEVICES, SHALL BE SECURED USING ITEM ㊿ PER ND 1002211.
19. MARK CONDUCTOR IDENTIFICATION PER ND 1002019 (ES-2475-7).

CONDUCTOR	FROM	STRIP	TIN	TO	STRIP	TIN	ITEM NO.	LENGTH
B1 - RED (P1)	B1 - P1			TB1-2	.30	YES		8.00
B1 - YEL (P2)	B1 - P2			TB1-1				
B1 - BLK (P3)	B1 - P3			TB1-1				
B1 - YEL (S2)	B1 - S2			TB1-8				
B1 - BLU (S4)	B1 - S4			TB1-10				8.00
B2 - RED (P1)	B2 - P1			TB1-3				5.25
B2 - YEL (P2)	B2 - P2			TB1-1				
B2 - BLK (P3)	B2 - P3			TB1-1				
B2 - YEL (S2)	B2 - S2			TB1-4				
B2 - BLU (S4)	B2 - S4			TB1-12				5.25
AA-1 YEL	TB2-1	.30	YES	TB1-8			32	6.00
AA-2 YEL	TB2-2	.30	YES	TB1-4	.30	YES	32	6.00

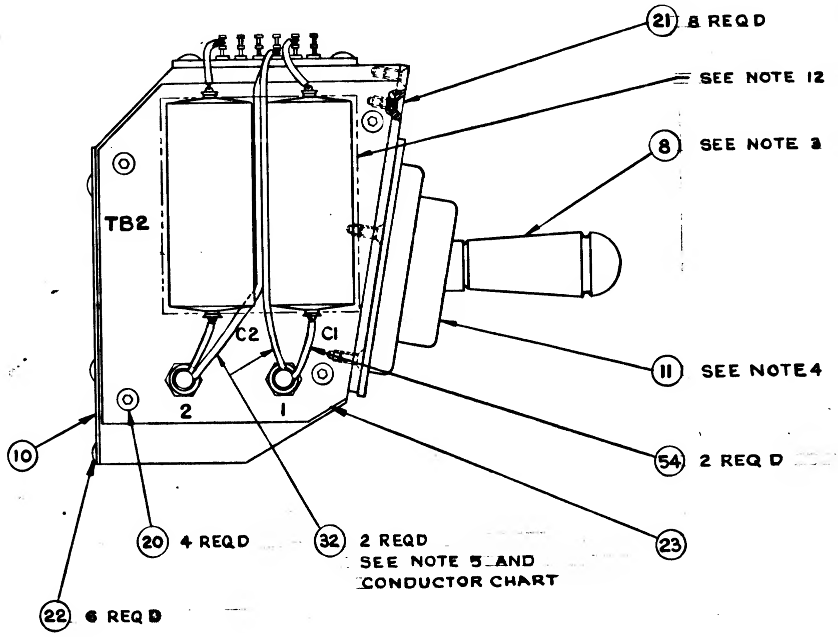
SEE NOTE 14 (B2 - RED (P1) THRU B2 - BLU (S4))

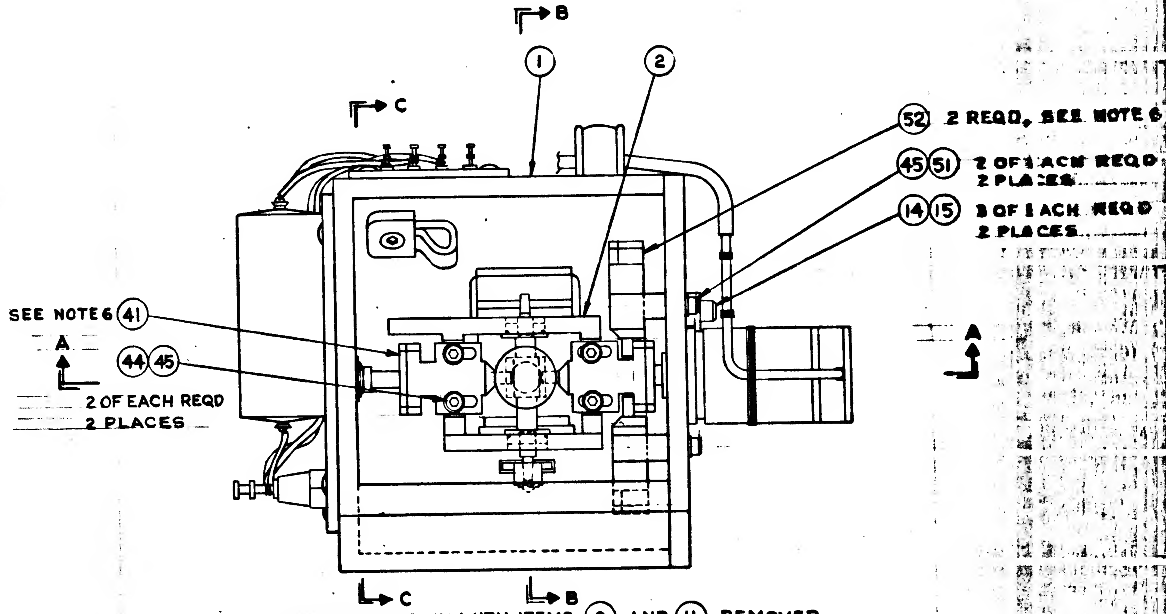
SEE NOTE 19 (AA-1, AA-2)



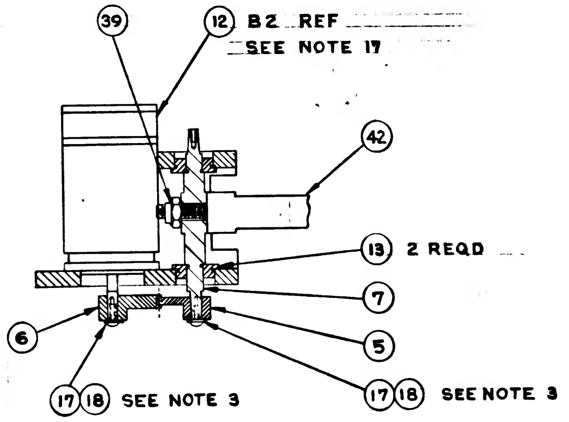


PARTIAL SECTION C-C

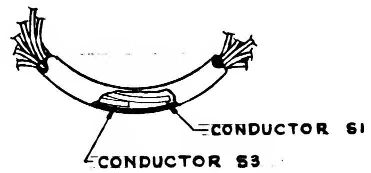




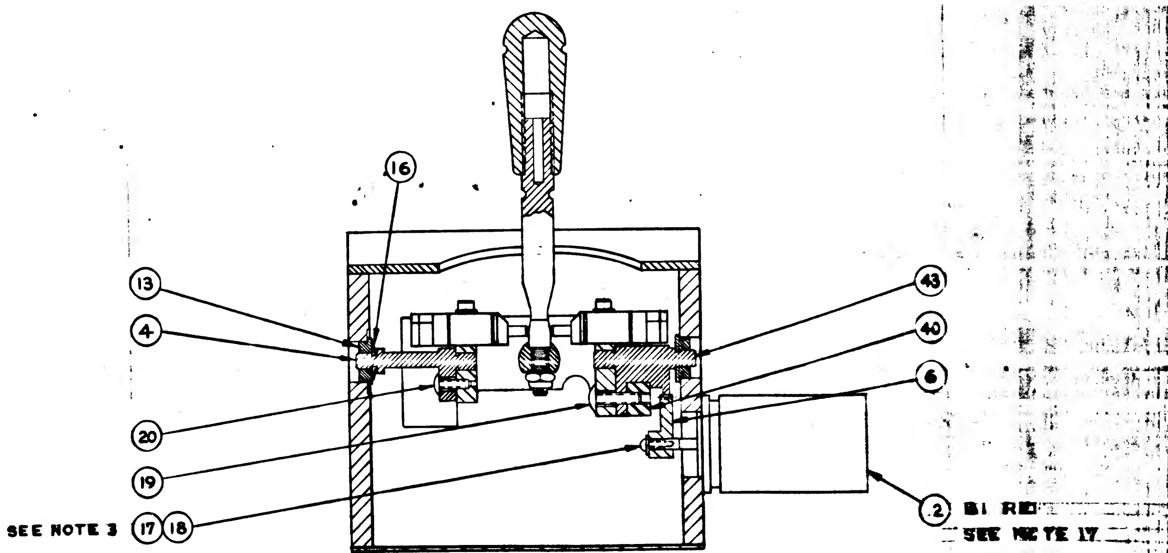
VIEW SHOWN WITH ITEMS ⑨ AND ⑪ REMOVED



PARTIAL SECTION B-B



DETAIL A 2 PLACES
SEE NOTE 17



PARTIAL SECTION A-A

1021700

PENNANT NOTE GENERAL NOTES

1 SEE CONDUCTOR CHART. PENNANT NOTE 1.

2 SEE CONDUCTOR CHART. PENNANT NOTE 2.

3 INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327.

4 MARK CONDUCTOR IDENTIFICATION PER ND1002019.

5 SPACING OF CONDUCTOR IDENTIFICATION SHALL BE EVERY 1.2 INCHES.

6 SPIRALLING OF THE MARKING IS ALLOWED.

7 LACE HARNESS USING ITEM 8.

8 IDENTIFY USING DRAWING NUMBER AND REVISION LETTER PER ND1002019 (ES-267).

9 Y OR N IN TINNED COLUMN INDICATES YES OR NO.

10 GRID IS SHOWN FOR DIMENSIONING PURPOSES.

11 GRID MODULE IS 1 INCH BASIC.

12 UNLESS OTHERWISE SPECIFIED - FEATURE CENTERLINES AT TRUE POSITION WITHIN + OR - .25 INCH RELATIVE TO GRID. ENDS OF CONDUCTORS OR ACCESSORIES AT TRUE POSITION WITHIN + OR - .12 INCH RELATIVE TO GRID. TRUE POSITION DIMENSIONS ARE REGARDLESS OF FEATURE SIZE.

13 BREAKOUTS OF INDIVIDUAL OR GROUPS OF CONDUCTORS ARE MINIMUM CONFIGURATION.

14 VENDOR ITEM - SEE SPECIFICATION CONTROL DRAWING.

15 VENDOR ITEM - SEE SOURCE CONTROL DRAWING.

MANNED SPACECRAFT CENTER HOUSTON, TEXAS
SIZE A 1021703
SCALE-NONE REV LTR ≠A SHEET 2 OF 8

PENNANT NOTE GENERAL NOTES

16 SOLDER PER ND1002071 USING ITEMS 9 AND 10.

17 FABRICATE HARNESS IN ACCORDANCE WITH ND1002032.

18 FILL UP UNASSIGNED CONTACT HOLES USING ITEM 5.

19 ENCAPSULATE REAR OF CONNECTOR (ITEM 3) PER ND1002236 USING ITEMS 12, 13 AND 14.

20 ASSEMBLE ITEM 11 TO ITEM 3 AFTER ENCAPSULATING REAR OF CONNECTOR.

TOLERANCE CHART, UNLESS OTHERWISE SPECIFIED ---

APPLICABLE LENGTH FOR STRIP WIRE, STRIP JACKET, CUT WIRE OR CUT SHIELD.	TOLERANCE STRIP WIRE	TOLERANCE STRIP JACKET	TOLERANCE CUT WIRE	TOLERANCE CUT SHIELD
UNDER 1 INCH	+.03-.00	+.06-.06	+.06-.06	+.06-.06
1 INCH TO 6 INCHES	+.06-.00	+.25-.25	+.25-.25	+.25-.25
6 INCHES TO 6 FEET		+.50-.50	+.50-.50	+.50-.50

MANNED SPACECRAFT CENTER HOUSTON, TEXAS
SIZE A 1021703
SCALE-NONE REV LTR ≠A SHEET 3 OF 8

14573

APPLICATION

NEXT ASSY	USED ON
1015064-021	1015023-021

REVISIONS

SYM	DESCRIPTION	DATE	APPROVAL
A	UPGRADED FOR CLASS A RELEASE	23 NOV64	FK

Chamberlain 10-Nov-64

REV								
SHEET								
REV STATUS REV	A	A	A	A	A	A	A	A
OF SHEETS SHEET	1	2	3	4	5	6	7	8

AC SPARK PLUG DIVISION, GMC
MILWAUKEE, WISCONSIN
ACSP PN

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

DRAWN R. Tomczak DATE 12 NOV 64
CHECKED 17 NOV 64
APPROVAL 11/19/64
APPROVAL 11/30/64
NASA APPROVAL 12-1-64
MIT APPROVAL
CONTRACT

WIRING HARNESS BRANCHED - A

CODE IDENT NO. SIZE A 1021703 REV A
SCALE NONE SHEET 1 OF 8

LIST OF MATERIALS

PENNANT NOTE	ITEM	QTY	PART NO	DESCRIPTION
	1	1	1021703- 1	WIRE 1010789- 14 (YELLOW) 16AWG, 14.5 INCHES TOTAL LENGTH
	2	1	1021703- 2	WIRE 1010789- 1 (YELLOW) 24AWG 6 FEET 5.0 INCHES TOTAL LENGTH
14	3	1	1010823- 1	CONNECTOR PLUG ELECTRICAL
	4	1	1015059	ADAPTER PLATE, DIODE MODULE (INSEP ASSY)
14	5	87	1010738- 5	CONTACT, NO 22
14	6	21	1010738- 7	CONTACT, NO 28
14	7	1	1010638- 6	TERMINAL LUG
15	8	AR	1012507-001	TAPE, LACING AND TYING
	9	AR	QQ-S-571	SOLDER SN60 WRAP2 (ES-2175, ALLOY 1)
	10	AR	MIL-F-14256	FLUX (ES-2798)
14	11	1	1010812- 3	GASKET
14	12	AR	1012503- 1	COMPOUND, POLYURETHANE
14	13	AR	1012503- 2	COMPOUND, POLYURETHANE
	14	AR	TT-M-261	METHYL ETHYL KETONE

MANNED SPACECRAFT CENTER HOUSTON, TEXAS
SIZE A 1021703
SCALE-NONE REV LTR ≠A SHEET 4 OF 8

INCHES
1 2
PHOTOGRAPHIC SCALE ONLY

CONDUCTOR NUMBER	INDIVIDUAL LENGTH ITEM NO.	2	FROM CIRCUIT POINT	CUT WIRE OR SHIELD / STRIP WIRE OR JACKET 2	TIN	2	TERMINATION SPEC. 1 ITEM NO.	NO.	TO CIRCUIT POINT	CUT WIRE OR SHIELD / STRIP WIRE OR JACKET 2	TIN	2	TERMINATION SPEC 1 ITEM NO.	NO.
A 1	2		J1- 38	9	N		5	1	T1- 5	30	Y			5
A 2	2		J1- 39	9	N		5	1	T1- 3	30	Y			5
A 3	2		J1- 48	9	N		5	1	T1- 7	30	Y			5
A 4	2		J1- 49	9	N		5	1	T1- 4	30	Y			5
A 5	2		T1- 6	30	Y			5	T1- 4	30	Y			5
A 6	2		J1- 68	9	N		5	1	T1- 1	30	Y			5
A 7	2		J1- 69	9	N		5	1	T1- 2	30	Y			5
A 8	2		J1- 92	9	N		5	1	E2	30	Y			3
A 9	2		J1- 93	9	N		5	1	E2	30	Y			3
A 10	2		J1- 94	9	N		5	1	E2	30	Y			3
A 11	2		J1- 95	9	N		5	1	E2	30	Y			3
A 12	1		T1- 8	30	N			5	E2	30	N			3
A 13	2		J1-105	9	N		5	1	E1	30	Y			4
A 14	2		J1-106	9	N		5	1	E1	30	Y			4
A 15	2		J1-107	9	N		5	1	E1	30	Y			4
A 16	1		T1- 9	30	N			5	E1	30	N			4
A 17	2		J1- 1	9	N		5	1	E3	30	N		7	2
A 18	4		J2- 1					6	J1- 15	9	N		6	1

1 THE STD CONDUCTOR TERMINATION FIGURES ARE PER

2 DIMENSIONS ARE IN INCHES AND TWO PLACE DECIMALS.

MANNED
SPACECRAFT
CENTER
HOUSTON, TEXAS

SIZE A 1021703

SCALE - NONE REV LTR ✗ A SHEET 5 OF 8

CONDUCTOR NUMBER	INDIVIDUAL LENGTH ITEM NO.	2	FROM CIRCUIT POINT	CUT WIRE OR SHIELD / STRIP WIRE OR JACKET 2	TIN	2	TERMINATION SPEC. 1 ITEM NO.	NO.	TO CIRCUIT POINT	CUT WIRE OR SHIELD / STRIP WIRE OR JACKET 2	TIN	2	TERMINATION SPEC 1 ITEM NO.	NO.
A 19	4		J2- 2					6	J1- 44	9	N		6	1
A 20	4		J2- 3					6	J1- 19	9	N		6	1
A 21	4		J2- 4					6	J1- 47	9	N		6	1
A 22	4		J2- 5					6	J1- 22	9	N		6	1
A 23	4		J2- 6					6	J1- 9	9	N		6	1
A 24	4		J2- 7					6	J1- 24	9	N		6	1
A 25	4		J2- 8					6	J1- 104	9	N		6	1
A 26	4		J2- 9					6	J1- 12	9	N		6	1
A 27	4		J2- 10					6	J1- 43	9	N		6	1
A 28	4		J2- 11					6	J1- 16	9	N		6	1
A 29	4		J2- 12					6	J1- 14	9	N		6	1
A 30	4		J2- 13					6	J1- 82	9	N		6	1
A 31	4		J2- 14					6	J1- 5[illegible]	9	N		6	1
A 32	4		J2- 15					6	J1- 32	9	N		6	1
A 33	4		J2- 16					6	J1-18	9	N		6	1
A 34	4		J2- 17					6	J1- 13	9	N		6	1
A 35	4		J2- 18					6	J1- 8	9	N		6	1
A 36	4		J2- 19					6	J1- 10	9	N		6	1

1 THE STD CONDUCTOR TERMINATION FIGURES ARE PER

2 DIMENSIONS ARE IN INCHES AND TWO PLACE DECIMALS.

MANNED
SPACECRAFT
CENTER
HOUSTON, TEXAS

SIZE A 1021703

SCALE - NONE REV LTR ✗ A SHEET 6 OF 8

CONDUCTOR NUMBER	INDIVIDUAL LENGTH ITEM NO.	2	FROM CIRCUIT POINT	CUT WIRE OR SHIELD / STRIP WIRE OR JACKET 2	TIN	2	TERMINATION SPEC. 1 ITEM NO.	NO.	TO CIRCUIT POINT	CUT WIRE OR SHIELD / STRIP WIRE OR JACKET 2	TIN	2	TERMINATION SPEC 1 ITEM NO.	NO.
A 37	4		J2- 20					6	J1- 83	9	N		6	1
A 38	4		J2- 21					6	J1- 33	9	N		6	1
A 39	2		J1-108	9	N		5	1	E1	30	Y			4

1 THE STD CONDUCTOR TERMINATION FIGURES ARE PER

2 DIMENSIONS ARE IN INCHES AND TWO PLACE DECIMALS.

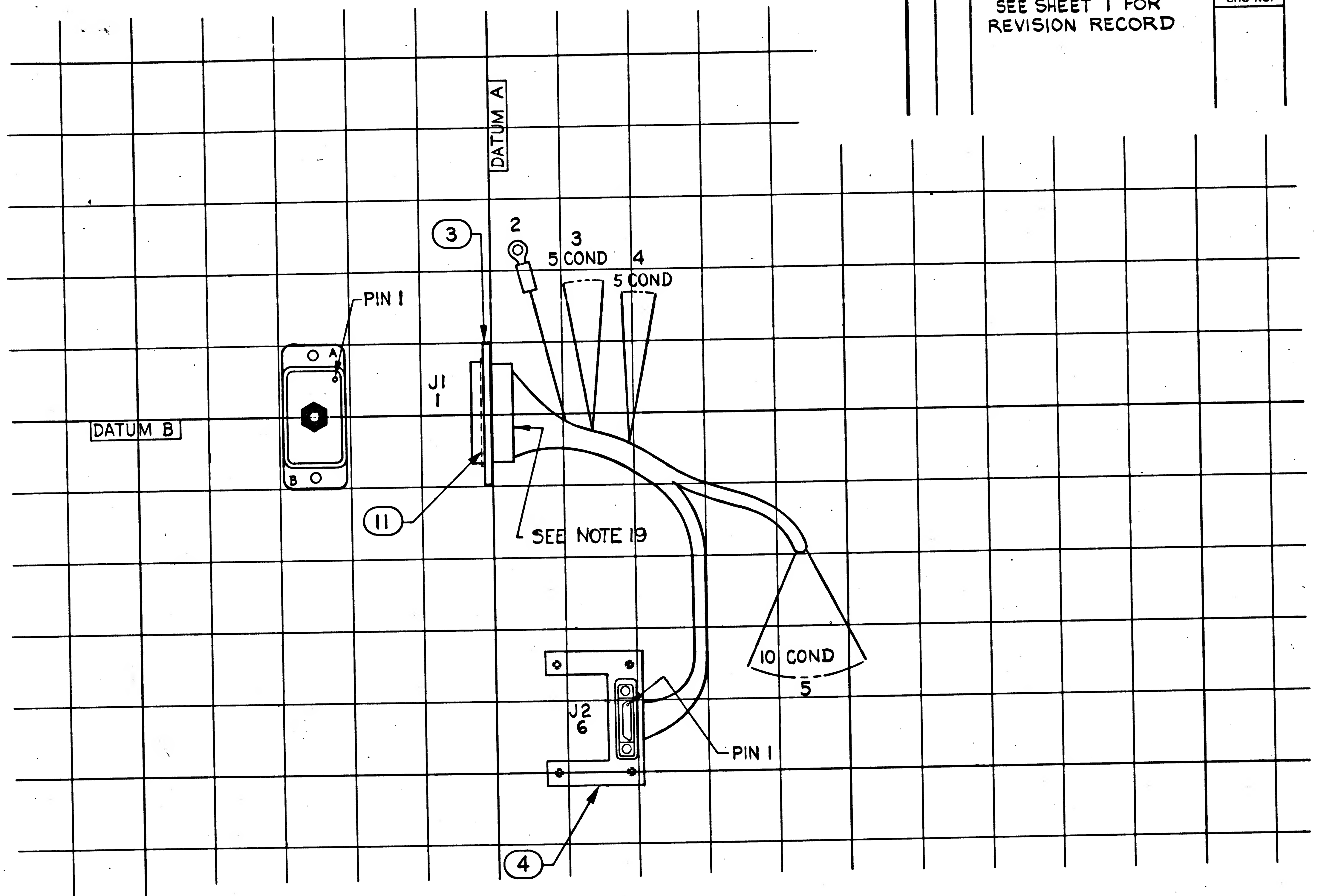
MANNED
SPACECRAFT
CENTER
HOUSTON, TEXAS

SIZE A 1021703

SCALE - NONE REV LTR ✗ A SHEET 7 OF 8

1021703 A

REVISIONS 14573					
SYM	ZONE	DESCRIPTION	CHG NO.	DATE	APPD.
		SEE SHEET 1 FOR REVISION RECORD			



MASTER

1015064-021	1015023-021
NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± —— DECIMALS ± —— ANGLES ± ——
DO NOT SCALE THIS DRAWING
MATERIAL ——
CONTRACT NAS 9-497

AC SPARK PLUG DIVISION, GMC
MILWAUKEE, WISCONSIN
ACSP PN
DRAWN R. Tamsen DATE 12 NOV 64
CHECKED A. Udorich 17 NOV 64
APPROVAL L. Saje 11/19/64
APPROVAL 11/30/64
NASA APPROVAL W J R 12/ /64
MIT APPROVAL 12/ /64

MANNED
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HOUSTON, TEXAS

WIRING HARNESS
BRANCHED-A

CODE IDENT NO.
SIZE C
1021703
SCALE FULL
SHEET 8 OF 8

INCHES
0 1 2
PHOTOGRAPHIC SCALE ONLY

TDRR 22049 AUG 31 1965

APPLICATION		REVISIONS			
NEXT ASSY	USED ON	SYM	DESCRIPTION	DATE	APPROVAL
1014628	1015023	A	REVISED PER D060766	12 JUL 65	LK
		B	INITIAL CLASS A RELEASE PER TDRR NO. 22049		

REV					
SHEET					
REV STATUS	REV	B	B	B	B
OF SHEETS	SHEET	1	2	3	4	5

MIT
INSTRUMENTATION LAB
CAMBRIDGE, MASS
CONTRACT
DRAWN Splane DATE 17 JUN 65
CHECKED W. Diehl 18 Jun '65
APPROVAL 24 Jun 65
APPROVAL 24 AUG 65
NASA APPROVAL
MIT APPROVAL 31 Aug 65
CONTRACT

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

WIRING HARNESS "B"
IMU CONTROL PANEL

CODE IDENT NO. 80230 SIZE A 1021715 REV B
SCALE — SHEET 1 OF 5

WIRING HARNESS B 1021715 A

GENERAL NOTES

NOTE NUMBER	DESCRIPTION
1	NOTE ONE IS NOT APPLICABLE
2	INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327.
3	APPLY REFERENCE DESIGNATIONS TO SLEEVES PER ND1002019 USING .10-.06 INCH HIGH CHARACTERS. POSITION AS SHOWN.
4	IDENTIFY USING DRAWING NO. PER ND 1002019.
5	INSTALL CRIMP STYLE TERMINALS IN ACCORDANCE WITH ND1002206.
6	VENDOR ITEM - SEE SPECIFICATION CONTROL DRAWING.
7	VENDOR ITEM - SEE SOURCE CONTROL DRAWING.
8	PARTIAL REFERENCE DESIGNATIONS ARE SHOWN. FOR COMPLETE DESIGNATIONS PREFIX WITH 50A2.

TOLERANCE CHART, UNLESS OTHERWISE SPECIFIED ---

APPLICABLE LENGTH FOR STRIP WIRE, STRIP JACKET, CUT WIRE OR CUT SHIELD.	TOLERANCE			
	STRIP		CUT	
	WIRE	JACKET	WIRE	SHIELD
UNDER 1 INCH	+.03-.00	+.06-.06	+.06-.06	+.06-.06
1 INCH TO 6 INCHES	+.06-.00	+.25-.25	+.25-.25	+.25-.25
6 INCHES TO 6 FEET		+.50-.50	+.50-.50	+.50-.50

MANNED SPACECRAFT CENTER HOUSTON, TEXAS SIZE A 1021715
SCALE-NONE REV LTR A SHEET 2 OF 5

MIL 2084 4-63

WIRING HARNESS B

LIST OF MATERIALS

SEE NOTE NUMBER	ITEM	QTY	PART NO.	DESCRIPTION
6	1	1	1010789-014	16 AWG WIRE, YELLOW, 17.5 INCHES TOTAL LENGTH.
6	2	5	1012534- 45	INSULATION SLEEVING, HEAT SHRINK
6	3	3	1010638- 6	TERMINAL LUG
	4	2	1023021	TERMINAL LUG
7	5	AR	1012507-001	LACING TAPE
6	6	1	1010945-3	SPLICE REDUCER
6	7	1	1012534-75	INSULATION SLEEVING, HEAT SHRINK

MANNED SPACECRAFT CENTER HOUSTON, TEXAS SIZE A 1021715
SCALE-NONE REV LTR A SHEET 3 OF 5

MIL 2084-4-64

WIRING HARNESS B 1021715 A

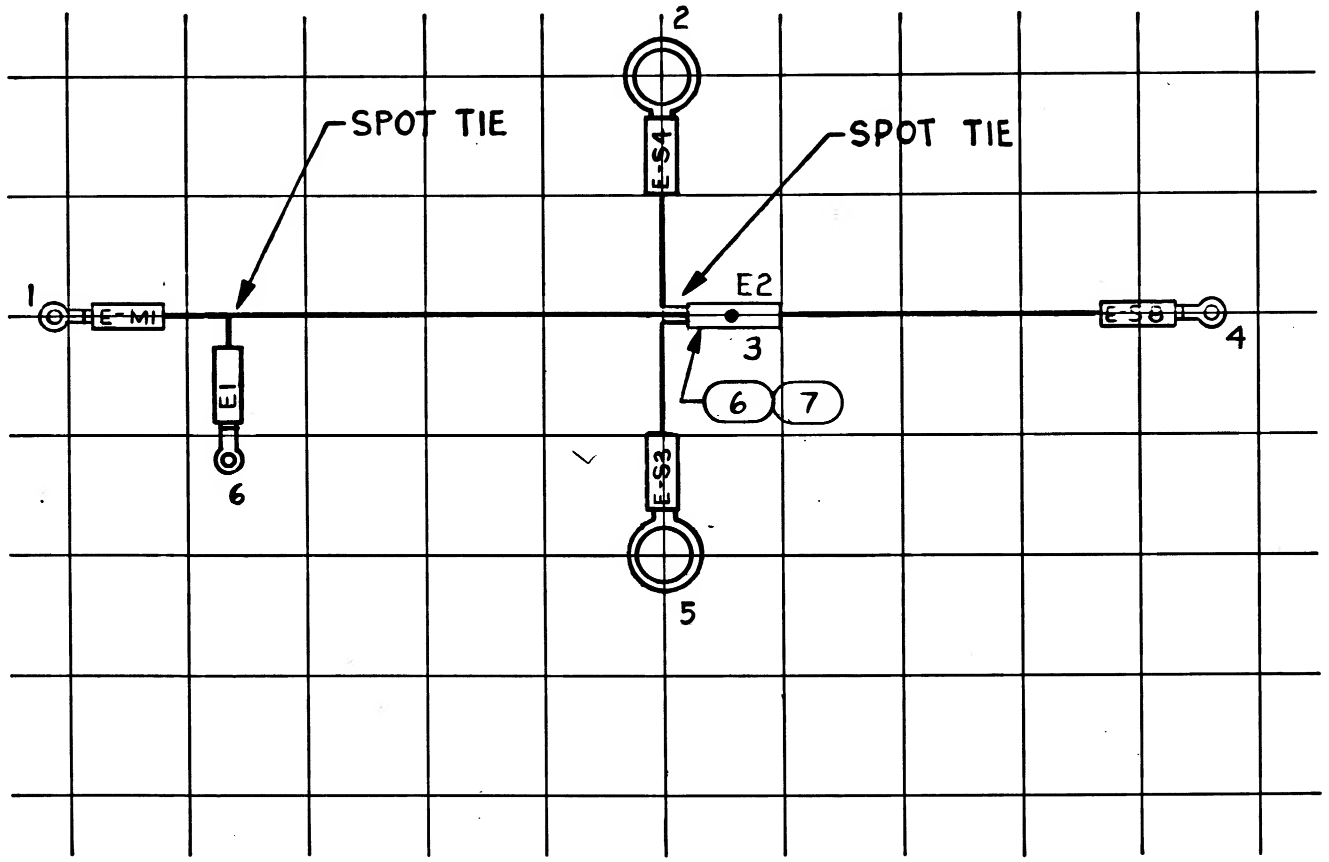
LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
B 1	1		E-M1 E2	1 3				.25 .25	NO NO		2, 3 6, 7	
B 2	1		E1 E2	6 3				.25 .25	NO NO		2, 3	
B 3	1		E-S3 E2	5 3				.25 .25	NO NO		2, 4	
B 4	1		E-S4 E2	2 3				.25 .25	NO NO		2, 4	
B 5	1		E-S8 E2	4 3				.25 .25	NO NO		2, 3	

MANNED SPACECRAFT CENTER HOUSTON, TEXAS SIZE A 1021715
SCALE-NONE REV LTR A SHEET 4 OF 5

MIL 2084 4-63

REVISIONS CL.A. 22049 AUG 31 1965

SYM	ZONE	DESCRIPTION	CHG NO.	DATE	APPD.
B		INITIAL CLASS A RELEASE PER TDRR NO. 22049			



NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± — DECIMALS ±.005 ANGLES ± —
DO NOT SCALE THIS DRAWING
MATERIAL
CONTRACT

MIT
~~INSTRUMENTATION~~ LAB
CAMBRIDGE, MASS.
DWG NO CONTRACT
DRAWN Splane DATE 17 JUN 65
CHECKED W. Diehl 18 JUN '65
APPROVAL D. W. Mielenz 29 Jun '65
APPROVAL PC Watson 24 AUG 65 8/30/65
NASA APPROVAL 8/4/65
MIT APPROVAL 31 Aug 65

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

WIRING HARNESS "B"
IMU CONTROL PANEL

CODE IDENT NO. 80230
SIZE C
1021715
SCALE
SHEET 5 OF 5

MIL 1077C—P

SYM	ZONE	DESCRIPTION	CHG NO.	DATE	APPD.
A		REVISED PER TDRR 32248		10 DEC 66	K JAC

REVISIONS 14373

NOTES:
1. INTERPRET DRAWING IN ACCORDANCE WITH MIL-D-70327.
2. ALL PART NUMBERS ARE FOR REFERENCE ONLY.
3. DRAWING FOR REFERENCE: 1015064-021 AND -031 ASSEMBLY
4. PARTIAL REFERENCE DESIGNATIONS ARE SHOWN, PREFIX THEM WITH UNIT NUMBER OR ASSEMBLY DESIGNATION OR BOTH.

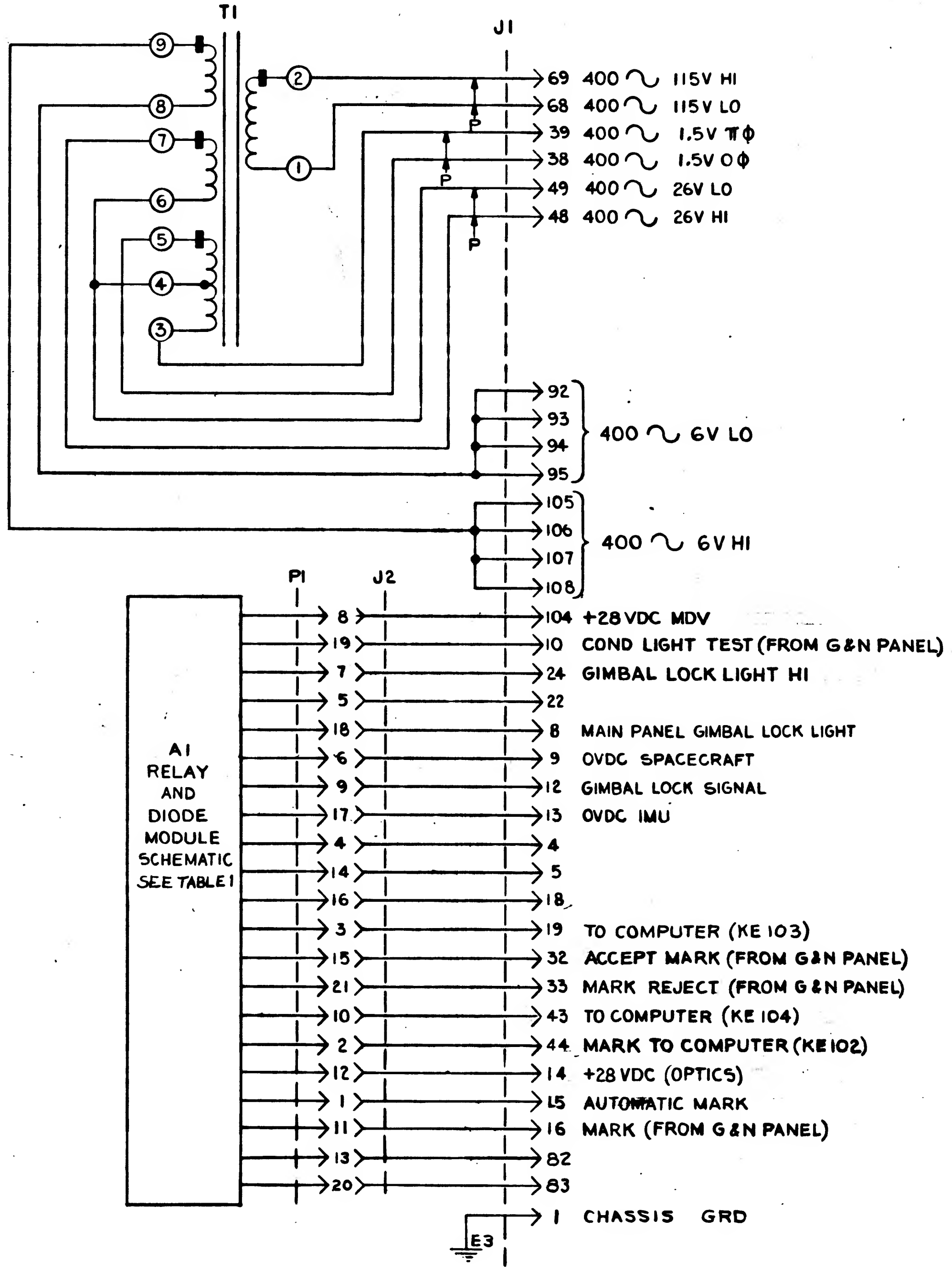

T1
J1
9
8
7
6
5
4
3
2
1
P
P
P
P
69 400 ∿ 115V HI
68 400 ∿ 115V LO
39 400 ∿ 1.5V π ϕ
38 400 ∿ 1.5V 0 ϕ
49 400 ∿ 26V LO
48 400 ∿ 26V HI
92
93
94
95
400 ∿ 6V LO
105
106
107
108
400 ∿ 6V HI
P1
J2
A1 RELAY AND DIODE MODULE SCHEMATIC SEE TABLE 1
8 → 104 +28 VDC MDV
19 → 10 COND LIGHT TEST (FROM G&N PANEL)
7 → 24 GIMBAL LOCK LIGHT HI
5 → 22
18 → 8 MAIN PANEL GIMBAL LOCK LIGHT
6 → 9 OVDC SPACECRAFT
9 → 12 GIMBAL LOCK SIGNAL
17 → 13 OVDC IMU
4 → 4
14 → 5
16 → 18
3 → 19 TO COMPUTER (KE 103)
15 → 32 ACCEPT MARK (FROM G&N PANEL)
21 → 33 MARK REJECT (FROM G&N PANEL)
10 → 43 TO COMPUTER (KE 104)
2 → 44 MARK TO COMPUTER (KE 102)
12 → 14 +28 VDC (OPTICS)
1 → 15 AUTOMATIC MARK
11 → 16 MARK (FROM G&N PANEL)
13 → 82
20 → 83
1 CHASSIS GRD
E3

TABLE I

CONTROL ELECTRONICS ASSY. PART NO.	RELAY AND DIODE MODULE PART NO.	RELAY AND DIODE MODULE SCHEMATIC
1015064-021	1015097-011	1021739
1015064-031	1015097-021	1009600

UNUSED TERMINALS

REF DES	TERMINAL NUMBER
J1	2, 3, 6, 7, 11, 17, 20, 21, 23, 25, 26, 27, 28, 29, 30, 31, 34, 35, 36, 37, 40, 41, 42, 45, 46, 47, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 70, 71, 72, 73, 74, 75 76, 77, 78, 79, 80, 81, 84, 85, 86, 87, 88, 89, 90, 91, 96, 97, 98, 99, 100, 101, 102. 103,

PARTS LIST

REF DESIG	PART NO.	DESCRIPTION	VALUE	TOL	RATING
T1	1010486-2	TRANSFORMER			
J2	1010472-1	CONNECTOR			
J1	1010823-4	CONNECTOR			
E3	1010638-6	LUG, TERMINAL			
A1	SEE TABLE I	RELAY, DIODE MODULE			

NEXT ASSY	USED ON
	1015064-021

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING
MATERIAL —
CONTRACT

AC SPARK PLUG DIVISION, GMC
MILWAUKEE, WISCONSIN
ACSP PN
DRAWN R. Rotka DATE SEP/30 /64
CHECKED F J Boehme 11-28-64
APPROVAL
APPROVAL
NASA APPROVAL 12-10-64
MIT APPROVAL

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

CONTROL ELECTRONICS
SCHEMATIC

CODE IDENT NO.
SIZE D
1021738
SCALE —
SHEET 1 OF 1

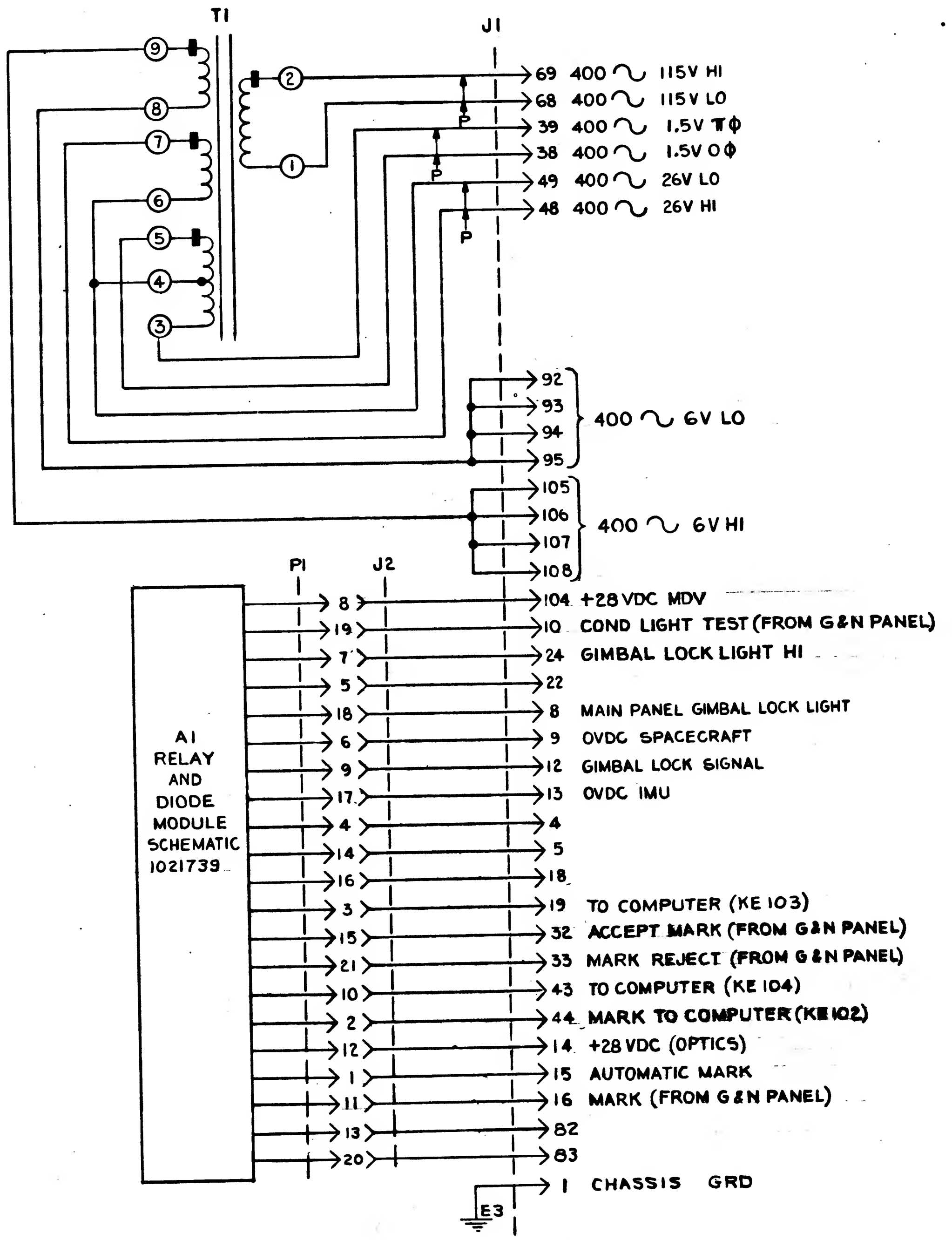
1021738

REVISIONS					
SYM	ZONE	DESCRIPTION	CHG NO.	DATE	APPD.

14373

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH MIL-D-70327.
2. ALL PART NUMBERS ARE FOR REFERENCE ONLY.
3. DRAWING FOR REFERENCE : 1015064-021 ASSEMBLY.
4. PARTIAL REFERENCE DESIGNATIONS ARE SHOWN, PREFIX THEM WITH UNIT NUMBER OR ASSEMBLY DESIGNATION OR BOTH.



UNUSED TERMINALS

REF DES	TERMINAL NUMBER
J1	2, 3, 6, 7, 11, 17, 20, 21, 23, 25, 26, 27, 28, 29, 30, 31, 34, 35, 36, 37, 40, 41, 42, 45, 46, 47, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 70, 71, 72, 73, 74, 75 76, 77, 78, 79, 80, 81, 84, 85, 86, 87, 88, 89, 90, 91, 96, 97, 98, 99, 100, 101, 102. 103,

REF DESIG	PART NO.	DESCRIPTION	VALUE	TOL	RATING
T1	1010486-2	TRANSFORMER			
J2	1010472-1	CONNECTOR			
J1	1010823-4	CONNECTOR			
E3	1010638-6	LUG, TERMINAL			
A1	1015097-011	RELAY, DIODE MODULE			

PARTS LIST

MASTER

1015064-021	
NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING
MATERIAL
CONTRACT

AC SPARK PLUG DIVISION, GMC
MILWAUKEE, WISCONSIN
ACSP PN
DRAWN R. Rotka DATE 6 Apr 30 '64
CHECKED F. J. Boehme 11-28-64
APPROVAL J. Kiernan 12/14/64
APPROVAL
NASA APPROVAL A. J. Rhine 12-1-64
MIT APPROVAL W. Kupfer 1 Dodd

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

CONTROL ELECTRONICS
SCHEMATIC

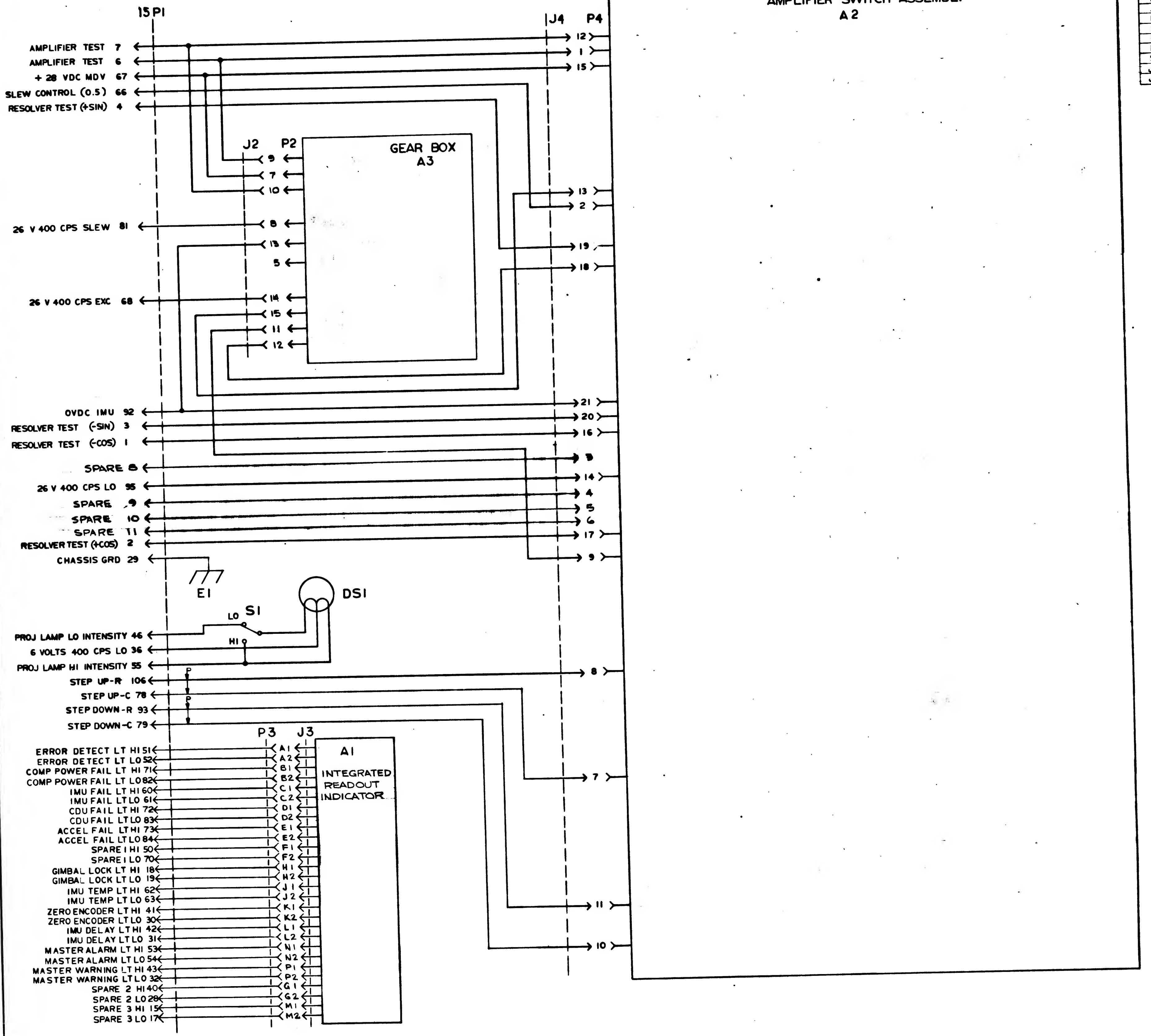
CODE IDENT NO. | SIZE D | 1021738
SCALE — | SHEET 1 OF 1

NOTICE — WHEN GOVERNMENT DRAWINGS SPECIFICATIONS OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED FURNISHED OR IN ANY WAY SUPPLIED THE SAID DRAWINGS SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE USE OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO

REF. DES	PART NO	DESCRIPITION
A1	1012159	INDICATOR INTEGRATED READOUT
A2	1021740	AMP & SWITCH UNIT ASSY OF
A3	1012223-011	GEAR BOX ASSY
B1	1011371	RESOLVER
B2	1011379	MOTOR
DS1	1011413	LAMP PROJECTION
E1	MS25036-48	TERMINAL LUG
J2	1010844-013	CONNECTOR
P1	1010825-5	
P2	1010771-113	
P3	1010809-002	
P4	1010779-9	CONNECTOR
S1	1011368	SWITCH
J4	1010779-8	CONNECTOR, 90° LEADS
J3	1010808-002	CONNECTOR

REVISIONS 5530

SYM	DESCRIPTION	DATE	APPROVAL
	INITIAL CLASS A RELEASE TDRR		



NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327.
2. PART NO'S, APPEARING IN LIST OF MATERIALS ARE FOR REF. ONLY.
3. VALUES ARE IN OHMS & MICROFARADS.
4. DRAWINGS FOR REFERENCE:
   1012221 ASSEMBLY DRAWING

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO

LIST OF MATERIALS

NEXT ASSY	USED ON

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING
MATERIAL
HEAT TREATMENT
FINAL FINISH

MIT
INSTRUMENTATION LAB
CAMBRIDGE MASS
DWG NO. CONTRACT
DRAWN L. Hood DATE 12-9-64
CHECKED 30 DEC 64
APPROVAL 12/31/64
APPROVAL
NASA APPROVAL 1-13-65
MIT APPROVAL 1-13-65

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

MAP & DATA VIEWER SCHEMATIC DIAGRAM

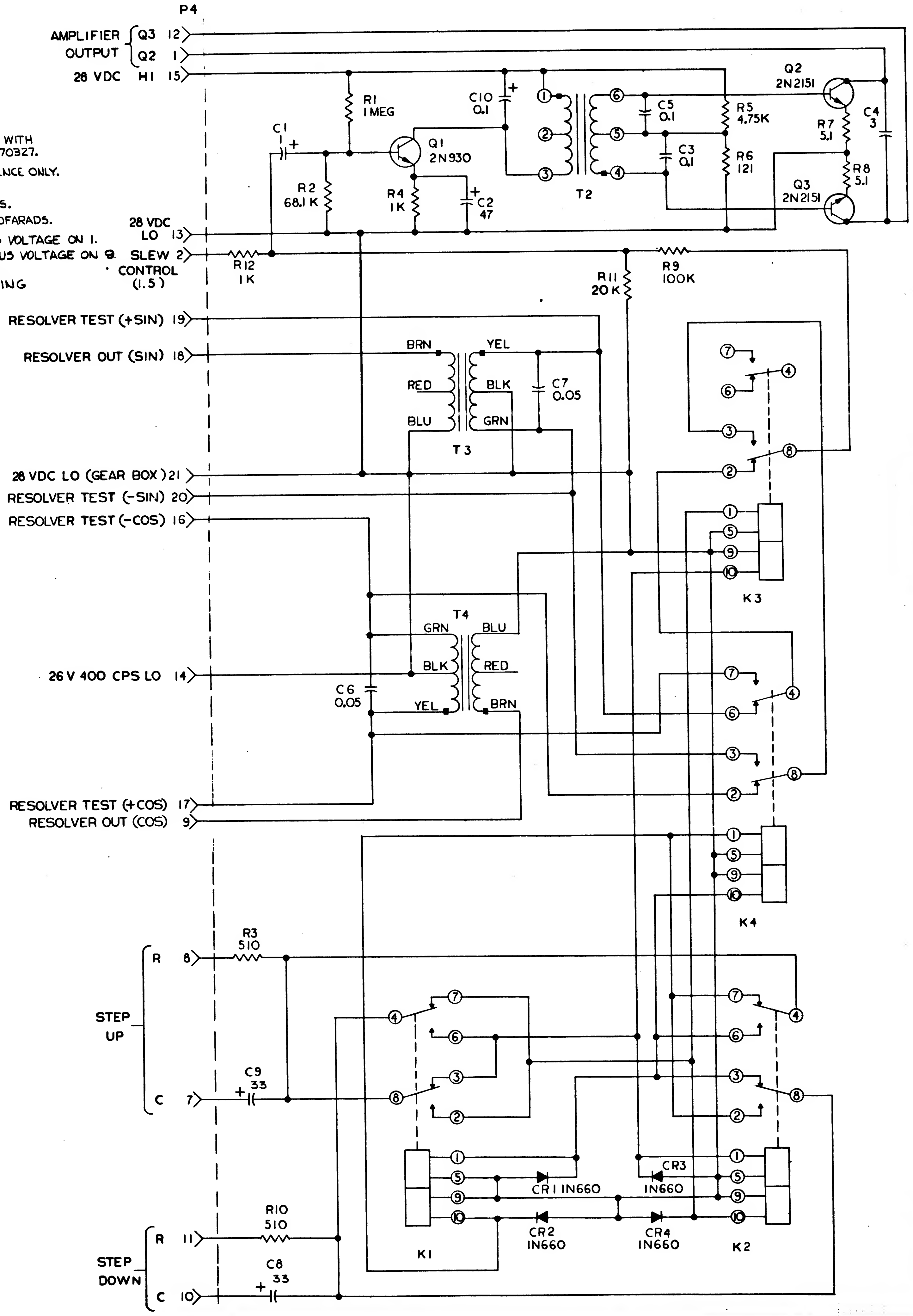
CODE IDENT NO.
SIZE E
NASA DRAWING NO 1021743
SCALE NONE
WT
SHEET 1 OF 1

1021743

NOTICE — WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS, OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327.
2. ALL PART NUMBERS ARE FOR REFERENCE ONLY.
3. UNLESS OTHERWISE SPECIFIED:
   A. RESISTOR VALUES ARE IN OHMS.
   B. CAPACITOR VALUES ARE IN MICROFARADS.
4. RELAYS 1&2 ARE SHOWN WITH A PLUS VOLTAGE ON 1.
   RELAYS 3&4 ARE SHOWN WITH A PLUS VOLTAGE ON 9.
5. DRAWINGS FOR REFERENCE:
   102174C ASSEMBLY DRAWING



REF DES	PART NO.	DESCRIPTION	VALUE	TOL ±	RATING
C1	1010393-029	CAPACITOR	.1 UF	10%	33 VDC
C2	1006755-89		47	10%	35
C3	1010375-25		0.1	5%	50
C4	1010264-40		3	5%	200
C5	1010375-25		0.1	5%	50
C6	1010279-216		0.05	10%	35
C7	1010279-216		0.05		35
C8	1006755-87		33		35
C9	1006755-87		33		35
C10	1010393-017		0.1		33
CR1	1010383	DIODE	1N660		
CR2					
CR3					
CR4					
K1	1010436-3	RELAY			
K2					
K3					
K4					
P4	1010779-9	CONN-RECP			
Q1	1010397-1	TRANSITOR	2N930		
Q2 Q3	1010269-2	TRANSITOR MATCHED PAIR	2N2151		
R1	1010363-827	RESISTOR	1 MEG	1%	1/4 W
R2	1010363-603		68.1 K		1/4 W
R3	1010389-49		510		3 W
R4	1010363-251		1K		1/4 W
R5	1010363-381		4.75K		
R6	1010363-75		121		
R7	1010389-1		5.1		3 W
R8	1010389-1		5.1		3 W
R9	1010363-635		100K		1/4 W
R10	1010389-49		510		3 W
R11	1010363-501		20 K		1/4 W
R12	1010364-251		1 K		1/8 W
T2	1010291-4	TRANSFORMER			
T3	1010324				
T4	1010324				

1021744

REVISIONS			
SYM	DESCRIPTION	DATE	APPROVAL

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

1021740	1012221
NEXT ASSY	USED ON

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± — DECIMALS ± — ANGLES ± —
DO NOT SCALE THIS DRAWING
MATERIAL —
HEAT TREATMENT —
FINAL FINISH —

MIT
INSTRUMENTATION LAB
CAMBRIDGE, MASS

DRAWN L. Hood DATE 10/23/64
CHECKED 5 MAY 64
APPROVAL E. Albert 11-30-64
APPROVAL
NASA APPROVAL 12-15-64
MIT APPROVAL

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

SCHEMATIC DIAGRAM, ELEC
AMPLIFIER AND SWITCH MODULE

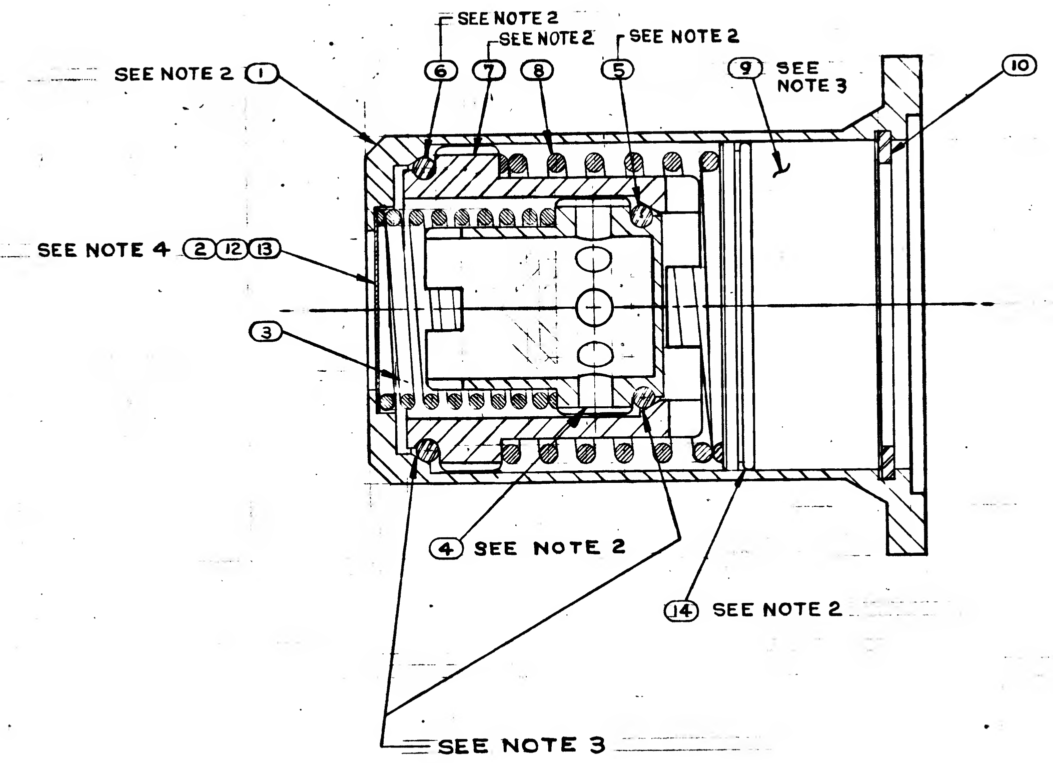
CODE IDENT NO. SIZE E NASA DRAWING NO. 1021744
SCALE — WT — SHEET 1 OF 1

1021752

REVISIONS 15259					
SYM	ZONE	DESCRIPTION	CHG NO.	DATE	APPD.
		INITIAL CLASS A RELEASE TDRR NO.			

NOTES:

1. INTERPRET DWG IN ACCORDANCE WITH STD PRESCRIBED BY MIL-D-70327.
2. APPLY ITEM ⑪ SPARINGLY AND WIPE OFF EXCESS, LEAVING A MONOLAYER FILM. APPLY ALLOVER ITEMS ⑤, ⑥, AND ⑭. APPLY TO INSIDE OF ITEM ① AND ⑦. APPLY TO OUTSIDE DIA OF ITEM ④ AND ⑦. APPLY TO O-RING GROOVE ON ITEM ④, ⑦, AND ⑨.
3. APPLY A THICK LAYER OF ITEM ⑪ TO VALVE SEATS.
4. BOND ITEM ② TO ITEM ①, USING ITEMS ⑫ AND ⑬, PER ND1002004, (TYPE I).
5. IDENTIFY USING DWG NO. PER ND1002019 AND SERIALIZE PER ND1002023.
6. PACKAGE PER MIL-P-116, METHOD IA-8, THIS MUST BE ACCOMPLISHED WITHIN 30 MINUTES AFTER REMOVAL OF ITEM ⑨ FROM ITS PACKAGE.



					ITEM NO.	EFFECTIVITY	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION
				1	14		1010858-38	O-RING
				AR	13		1010657	EPOXY RESIN
				AR	12		1010686	CATALYST
				AR	11		1010878	OIL, APIEZON-(OIL K)
				1	10		MS16625-4102	RING-RETAINER
				1	9		1021766-011	DESICCANT BASKET ASSEMBLY
				1	8		1021770	SPRING-INTAKE-COMPRESSION
				1	7		1021756	VALVE-INTAKE
				1	6		1010858-19	O-RING
				1	5		1010858-14	O-RING
				1	4		1021755	VALVE-EXHAUST
				1	3		1021772	SPRING-EXHAUST-COMPRESSION
				1	2		1021789	SCREEN
				1	1		1021753	HOUSING
				011				
DASH NO.								
QUANTITY								

NEXT ASSY	USED ON
1021700-021	1021700-021
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± — DECIMALS ± — ANGLES ± —
DO NOT SCALE THIS DRAWING
MATERIAL —
CONTRACT NAS 9-497

AC SPARK PLUG DIVISION, GMC
MILWAUKEE, WISCONSIN
ACSP PN
DRAWN J.P. Barker III DATE 7 Nov 64
CHECKED 29 Dec 64
APPROVAL 12/31/64
APPROVAL W. H. Thompson 1-5-65
NASA APPROVAL W. J. 1-5-65
MIT APPROVAL 5 Jan 65

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

DESICCATOR ASSEMBLY

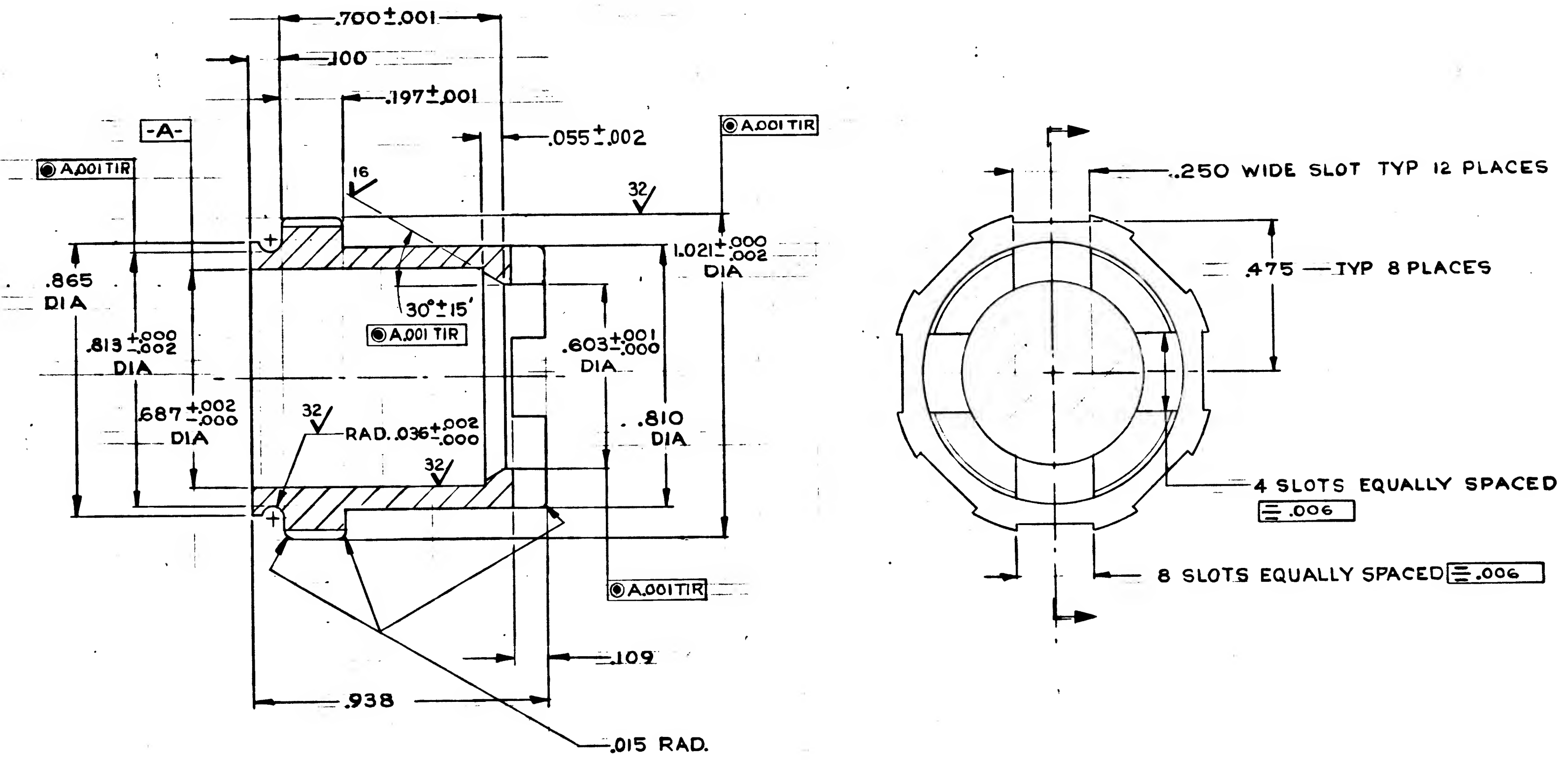
CODE IDENT NO.
SIZE D
1021752
SCALE 4/1
SHEET 1 OF 1

REVISIONS 15259

SYM	ZONE	DESCRIPTION	CHG NO	DATE	APPD.
		INITIAL CLASS A RELEASE TDRR NO.			

NOTES:

1. INTERPRET DWG IN ACCORDANCE WITH STD PRESCRIBED BY MIL-D-70327.
2. MATERIAL: QQ-A-225/6, 2024-T4 AL ALY, (ES 2104).
3. UNLESS OTHERWISE SPECIFIED;
   a. ALL DIA'S TO BE ◉ A.005 TIR .
   b. ALL SURFACES TO BE ∥ A.005 OR ⊥ A.005 .
   c. SURFACE ROUGHNESS MUST NOT EXCEED 63√
   d. ALL CORNERS TO BE .005 TO .015 RAD. OR CHAMFER.
4. FINISH: CHROMIUM PLATE .0005 TO .001 THICK PER SURFACE, PER QQ-C-320, CLASS 2, (ES-387) DIMENSIONS SHOWN ARE AFTER PLATING.
5. IDENTIFY USING DWG NO. PER ND1002019.



1021752-011	1021700-021	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ON FRACTIONS ± — DECIMALS ±.005 ANGLES ± — DO NOT SCALE THIS DRAWING	AC SPARK PLUG DIVISION, GMC MILWAUKEE, WISCONSIN ACSP PN DRAWN JPBooth III DATE 7 NOV 64 CHECKED . 29 DEC 64 APPROVAL 12/30/64 APPROVAL D.N. Thompson 1-4-65	MANNED SPACECRAFT CENTER HOUSTON, TEXAS INTAKE VALVE
NEXT ASSY	USED ON	MATERIAL SEE NOTE 2	NASA APPROVAL 1-5-65	CODE IDENT NO. | SIZE D | 1021756
APPLICATION		CONTRACT NAS 9-497	MIT APPROVAL	SCALE 4/1 | SHEET 1 OF 1

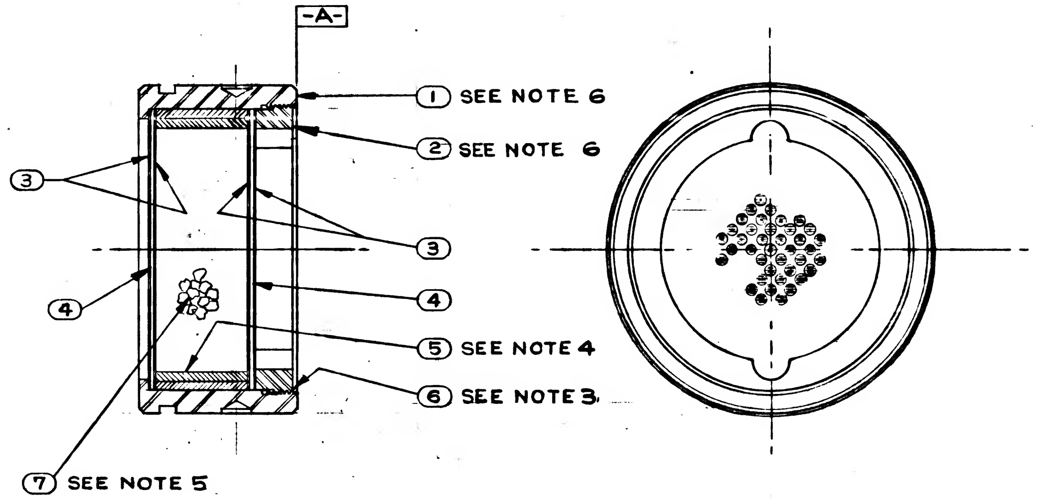
JPB 15/DEC/64

1021766

REVISIONS 15259					
SYM	ZONE	DESCRIPTION	CHG NO.	DATE	APPD.
		INITIAL CLASS A RELEASE TDRR NO.			

NOTES:

1. INTERPRET DRAWING PER MIL-D-70327.
2. IDENTIFY USING DWG NO. PER ND1002019
3. THREADS TO BE SECURED, USING ITEM ⑥ PER ND1002211.
4. ITEM ⑤ MUST BE ROLLED UP TO FIT INSIDE ITEM ① AS SHOWN.
5. FILL CAVITY WITH ITEM ⑦, UP TO TOP OF ITEM ⑤.
6. END OF ITEM ② TO BE FLUSH TO .055 BELOW SURFACE -A- OF ITEM ①.
7. PACKAGE PER MIL-P-116, METHOD IA-8, THIS MUST BE ACCOMPLISHED WITHIN 30 MINUTES AFTER REMOVAL OF ITEM ⑦ FROM ITS PACKAGE.



				AR	7		MIL-D-3716	DESICCANT, TYPE 4, GRADE H
				AR	6		MIL-S-22473, GRADE A	SEALING COMPOUND, RETAINING
				1	5		1021797	LINER STRIP
				2	4		1010898	FILTER
				4	3		1021795	SCREEN
				1	2		1021762	CAP
				1	1		1021763	HOUSING
				011	ITEM NO.	EFFECTIVITY	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION
DASH NUMBER								
QUANTITY REQUIRED					LIST OF MATERIALS			

1021752-011	1021752-011
NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± ___ DECIMALS ± ___ ANGLES ± ___
DO NOT SCALE THIS DRAWING
MATERIAL ———
CONTRACT NAS 9-497

AC SPARK PLUG DIVISION, GMC
MILWAUKEE, WISCONSIN
ACSP PN
DRAWN J.P.Bouthel DATE 17 DEC 64
CHECKED Swain 29 Dec 64
APPROVAL J.J. Kim 12/31/64
APPROVAL W.J. Thompson 1-5-65
NASA APPROVAL W.J. Rhine 1-5-65
MIT APPROVAL 5 Jan 65

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

DESICCANT BASKET ASSEMBLY

CODE IDENT NO.
SIZE D
1021766
SCALE 4/1
SHEET 1 OF 1

MIL 10770-K

MASTER

APPLICATION	
NEXT ASSY	USED ON
1007599-011	1015086

REVISIONS TDRR 16218

SYM	DESCRIPTION	DATE	APPROVAL
	INITIAL CLASS A RELEASE PER TDRR 16218	2/3/65	
A	REPLACED WITH CHANGE BY REV B PER TDRR 20531.	3 JULY 65	WJR MEM

Ⓐ REPLACED WITH CHANGE BY REV B

REV STATUS OF SHEETS	REV	A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
	SHEET	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16

AC SPARK PLUG DIVISION , GMC
MILWAUKEE, WISCONSIN

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

ACSP PN

DRAWN R. La Due DATE 29 DEC 64
CHECKED C. Piojda 19 JAN 65
APPROVAL D. Baita 19 JAN 65
APPROVAL 19 JAN 65
NASA APPROVAL
MIT APPROVAL 3 Feb 65
CONTRACT NAS 9-497

WIRE LIST BB,
AGE INTERCONNECT

CODE IDENT NO.
SIZE
1021791
REV A
SCALE —
SHEET 1 OF 16

APPLICATION		REVISIONS TDRR 16218			
NEXT ASSY	USED ON	SYM	DESCRIPTION	DATE	APPROVAL
1007599-011	1015086		INITIAL CLASS A RELEASE PER TDRR 16218	2/3/65	WK

REV																
SHEET																
REV STATUS REV	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
OF SHEETS SHEET	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16

AC SPARK PLUG DIVISION, GMC
MILWAUKEE, WISCONSIN

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

ACSP PN

DRAWN R. LaDue 29 DEC 64 DATE
CHECKED C. Pojda 19 JAN 65
APPROVAL A. Baita 19 JAN 65
APPROVAL [illegible] 19 JAN 65
NASA APPROVAL [illegible] 1/6/65
MIT APPROVAL W. [illegible] 3 Feb 65
CONTRACT NAS 9-497

WIRE LIST BB,
AGE INTERCONNECT

CODE IDENT NO.
SIZE
1021791
REV +
SCALE —
SHEET 1 OF 16

WIRE LIST BB

GENERAL NOTES

1 SEE CONDUCTOR CHART, PENNANT NOTE 1.

2 SEE CONDUCTOR CHART, PENNANT NOTE 2.

3 INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327.

4 Y OR N IN TINNED COLUMN INDICATES YES OR NO.

5 VENDOR ITEM - SEE SPECIFICATION CONTROL DRAWING.

6 THE SUFFIX LETTER OF A CONDUCTOR IDENTIFICATION NUMBER INDICATES CONDUCTOR SHIELDING, COLOR, OR TWISTING.
B - TO END SHIELD
K - TWISTED
L - BLUE
R - RED
W - WHITE

7 CONDUCTORS WITH THE SAME NUMBER ARE TWISTED TOGETHER

8 TWIST CONDUCTORS PER ND1002032.

9 PARTIAL CIRCUIT POINTS ARE SHOWN. PREFIX WITH UNIT NUMBER 56 FOR COMPLETE CIRCUIT POINT.

10 MARK SLEEVING ON MULTI-SHIELDED CONDUCTOR .12 INCH HIGH, WITH CONDUCTOR NUMBER, COLOR BLACK PER ND1002019.

MANNED SPACECRAFT CENTER HOUSTON, TEXAS | SIZE A | 1021791
SCALE-NONE | REV LTR + | SHEET 2

MIL 2064-4-64

WIRE LIST BB

GENERAL NOTES

TOLERANCE CHART, UNLESS OTHERWISE SPECIFIED ---

APPLICABLE LENGTH FOR WIRE OR CABLE, STRIP WIRE, STRIP JACKET, CUT WIRE OR CUT SHIELD.	TOLERANCE				
	WIRE OR CABLE	STRIP WIRE	STRIP JACKET	CUT WIRE	CUT SHIELD
UNDER 1 INCH	+ .06-.00	+.03-.00	+.06-.06	+.06-.06	+.06-.06
1 INCH TO 6 INCHES	+ .50-.00	+.06-.00	+.25-.25	+.25-.25	+.25-.25
6 INCHES TO 6 FEET	+1.00-.00		+.50-.50	+.50-.50	+.50-.50
OVER 6 FEET	+2.00-.00				

MANNED SPACECRAFT CENTER HOUSTON, TEXAS | SIZE A | 1021791
SCALE-NONE | REV LTR + | SHEET 3

MIL 2064-4-64

WIRE LIST BB

LIST OF MATERIALS

NOTE	ITEM	QTY	PART NO	DESCRIPTION
5	1	1	1021791-001	WIRE PER 1010807-005 24AWG COLOR WHITE TOTAL LENGTH 157 FT 4 INCHES
5	2	1	1021791-002	WIRE PER 1010807-003 WHT JKT 24AWG COLOR WHT,RD TOTAL LENGTH 3 FT 0 IN
5	3	1	1021791-003	WIRE PER 1010807-004 28AWG COLOR WHITE TOTAL LENGTH 9 FT 7 INCHES
5	4	1	1021791-004	WIRE PER 1010807-001 WHT JKT 28AWG COLOR WHT,RD,BLU TOTAL LENGTH 1 FT 4 IN
5	5	3	1010490-142	INSULATION, SLEEVING, ELEC, HEAT SHRINK
5	6	1	1010763- 1	SLEEVE, SOLDER
5	7	1	1010763- 2	SLEEVE, SOLDER

MANNED SPACECRAFT CENTER HOUSTON, TEXAS | SIZE A | 1021791
SCALE-NONE | REV LTR + | SHEET 4

MIL 2064-4-64

WIRE LIST BB

CONDUCTOR NUMBER	ITEM NO.	FROM CIRCUIT POINT	STRIP WIRE OR JACKET	TIN	CUT WIRE OR SHIELD	TERMINATION SPEC. ITEM NO.	TO CIRCUIT POINT	STRIP WIRE OR JACKET	TIN	CUT WIRE OR SHIELD	TERMINATION SPEC ITEM NO.	ROUTING
BB 1	1	J11-S4	138	N			J15-S6	138	N			
BB 2	1	J11-S1	138	N			J20-N1	138	N			
BB 3	1	J11-S2	138	N			J20-N2	138	N			
BB 4	1	J11-S5	138	N			J20-L2	138	N			
BB 5R	1	J11-N5	138	N			J12-N3	138	N			
BB 5W	1	J11-N4	138	N			J12-P3	138	N			
BB 6	1	J11-S4	138	N			J12-S5	138	N			
BB 7	1	J11-L4	138	N			J12-K3	138	N			
BB 8R	1	J11-L1	138	N			J12-H2	138	N			
BB 8W	1	J11-L2	138	N			J12-K2	138	N			
BB 9K	1	J11-B5	138	N			J12-B2	138	N			
BB 9L	1	J11-A6	138	N			J12-B1	138	N			
BB 9R	1	J11-A5	138	N			J12-A2	138	N			
BB 9W	1	J11-B6	138	N			J12-A1	138	N			
BB 10R	3	J11-B3	163	N			J17-B1	88	N			
BB 10W	3	J11-C3	163	N			J17-A1	88	N			
BB 11L	1	J11-P1	138	N			J17-N2	138	N			
BB 11R	1	J11-N1	138	N			J17-P2	138	N			

1 THE STD CONDUCTOR TERMINATION FIGURES ARE PER

2 DIMENSIONS ARE IN INCHES AND TWO PLACE DECIMALS.

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS
SIZE A
1021791
SCALE - NONE
REV LTR +
SHEET 5

WIRE LIST BB

CONDUCTOR NUMBER	ITEM NO.	FROM CIRCUIT POINT	STRIP WIRE OR JACKET	TIN	CUT WIRE OR SHIELD	TERMINATION SPEC. ITEM NO.	TO CIRCUIT POINT	STRIP WIRE OR JACKET	TIN	CUT WIRE OR SHIELD	TERMINATION SPEC ITEM NO.	ROUTING
BB 11W	1	J11-N2	138	N			J17-R2	138	N			
BB 12	1	J11-S3	138	N			J17-R1	138	N			
BB 13	1	J11-N6	138	N			J13-P6	138	N			
BB 14	1	J11-S4	138	N			J11-S5	138	N			
BB 15	1	J11-S1	138	N			J11-S2	138	N			
BB 16	1	J11-N3	138	N			J12-P4	138	N			
BB 17	1	J11-G2	138	N			J11-P6	138	N			
BB 18	1	J11-M5	138	N			J11-P3	138	N			
BB 19	1	J11-P2	138	N			J11-P3	138	N			
BB 20	1	J11-P3	138	N			J11-R3	138	N			
BB 21	1	J11-P4	138	N			J11-P5	138	N			
BB 22	1	J11-P6	138	N			J11-R6	138	N			
BB 23	1	J11-R1	138	N			J11-R2	138	N			
BB 24	1	J11-R4	138	N			J11-R5	138	N			
BB 25	1	J11-R6	138	N			J11-S6	138	N			
BB 26	1	J11-R5	138	N			J11-R6	138	N			
BB 27	1	J11-P4	138	N			J11-R4	138	N			
BB 28	1	J11-B5	138	N			J11-S6	138	N			

1 THE STD CONDUCTOR TERMINATION FIGURES ARE PER

2 DIMENSIONS ARE IN INCHES AND TWO PLACE DECIMALS.

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS
SIZE A
1021791
SCALE - NONE
REV LTR +
SHEET 6

WIRE LIST BB

CONDUCTOR NUMBER	ITEM NO.	FROM CIRCUIT POINT	STRIP WIRE OR JACKET	TIN	CUT WIRE OR SHIELD	TERMINATION SPEC. ITEM NO.	TO CIRCUIT POINT	STRIP WIRE OR JACKET	TIN	CUT WIRE OR SHIELD	TERMINATION SPEC ITEM NO.	ROUTING
BB 29	1	J12-B6	138	N			J14-H6	138	N			
BB 30R	1	J12-N3	138	N			J15-P6	138	N			
BB 30W	1	J12-P3	138	N			J15-P5	138	N			
BB 31R	1	J12-N5	138	N			J15-N6	138	N			
BB 31W	1	J12-P5	138	N			J15-N5	138	N			
BB 32	1	J12-S6	138	N			J20-P5	138	N			
BB 33R	1	J12-H4	138	N			J20-K6	138	N			
BB 33W	1	J12-K4	138	N			J20-K5	138	N			
BB 34	1	J12-G4	138	N			J20-M6	138	N			
BB 35	1	J12-S1	138	N			J20-M1	138	N			
BB 36	1	J12-S2	138	N			J20-M2	138	N			
BB 37L	1	J12-H5	138	N			J16-M2	138	N			
BB 37R	1	J12-H6	138	N			J16-M3	138	N			
BB 37W	1	J12-G6	138	N			J16-N3	138	N			
BB 38	1	J12-N1	138	N			J12-P1	138	N			
BB 39	1	J12-H4	138	N			J12-N2	138	N			
BB 40	1	J12-N4	138	N			J12-N5	138	N			
BB 41	1	J12-F1	138	N			J12-F2	138	N			

1 THE STD CONDUCTOR TERMINATION FIGURES ARE PER

2 DIMENSIONS ARE IN INCHES AND TWO PLACE DECIMALS.

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS
SIZE A
1021791
SCALE - NONE
REV LTR +
SHEET 7

WIRE LIST BB

CONDUCTOR NUMBER	ITEM NO.	FROM CIRCUIT POINT	STRIP WIRE OR JACKET	TIN	CUT WIRE OR SHIELD	TERMINATION SPEC. ITEM NO.	TO CIRCUIT POINT	STRIP WIRE OR JACKET	TIN	CUT WIRE OR SHIELD	TERMINATION SPEC ITEM NO.	ROUTING
BB 42	1	J12-K3	138	N			J13-C6	138	N			
BB 43K	1	J12-M5	138	N			J14-S5	138	N			
BB 43L	1	J12-M6	138	N			J14-S3	138	N			
BB 43R	1	J12-L6	138	N			J14-S2	138	N			
BB 43W	1	J12-K6	138	N			J14-R2	138	N			
BB 44	1	J12-A5	138	N			J13-D2	138	N			
BB 45	1	J12-A6	138	N			J13-F2	138	N			
BB 46	1	J12-L1	138	N			J20-N5	138	N			
BB 47	1	J12-S1	138	N			J12-S3	138	N			
BB 48	1	J12-S2	138	N			J12-S4	138	N			
BB 49	1	J12-R4	138	N			J12-F1	138	N			
BB 50	2		300		275	5		300		275	6	
BB 50B	1	J17-S4	138	N			SHLD BB 50	20	N			
BB 50R					288					288		
BB 50W		J12-P4	138	N			J17-R3	138	N			
BB 51R	1	J12-P6	138	N			J17-P3	138	N			
BB 51W	1	J12-N6	138	N			J17-N3	138	N			
BB 52	1	J12-F3	138	N			J17-M3	138	N			

1 THE STD CONDUCTOR TERMINATION FIGURES ARE PER

2 DIMENSIONS ARE IN INCHES AND TWO PLACE DECIMALS.

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS
SIZE A
1021791
SCALE - NONE
REV LTR +
SHEET 8

WIRE LIST BB

CONDUCTOR			FROM						TO						ROUTING
NUMBER	ITEM NO.	INDIVIDUAL LENGTH 2	CIRCUIT POINT	CUT WIRE OR SHIELD / STRIP WIRE OR JACKET 2	TIN	2	TERMINATION SPEC. 1 ITEM NO.	NO.	CIRCUIT POINT	CUT WIRE OR SHIELD / STRIP WIRE OR JACKET 2	TIN	2	TERMINATION SPEC 1 ITEM NO.	NO.	
BB 53	1		J12-N6	138	N				J12-R6	138	N				
BB 54	1		J12-P5	138	N				J12-R2	138	N				
BB 55	1		J12-C2	138	N				J13-C2	138	N				
BB 56	1		J12-G5	138	N				J16-R2	138	N				
BB 57	1		J12-R2	138	N				J12-R3	138	N				
BB 58	1		J12-R3	138	N				J12-R4	138	N				
BB 59	1		J12-B5	138	N				J13-R6	138	N				
BB 60	1		J13-N5	138	N				J14-H3	138	N				
BB 61	1		J13-N6	138	N				J14-K3	138	N				
BB 62	1		J13-A6	138	N				J14-A6	138	N				
BB 63L	1		J13-H6	138	N				J14-G1	138	N				
BB 63R	1		J13-K6	138	N				J14-H1	138	N				
BB 63W	1		J13-L6	138	N				J14-K1	138	N				
BB 64	1		J13-C6	138	N				J14-H5	138	N				
BB 65	1		J13-S6	138	N				J14-S6	138	N				
BB 66L	1		J13-S4	138	N				J14-S4	138	N				
BB 66R	1		J13-S2	138	N				J14-S1	138	N				
BB 66W	1		J13-R2	138	N				J14-R1	138	N				

1 THE STD CONDUCTOR TERMINATION FIGURES ARE PER
2 DIMENSIONS ARE IN INCHES AND TWO PLACE DECIMALS.

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS
SIZE A
1021791
SCALE - NONE
REV LTR +
SHEET 9

WIRE LIST BB

CONDUCTOR			FROM						TO						ROUTING
NUMBER	ITEM NO.	INDIVIDUAL LENGTH 2	CIRCUIT POINT	CUT WIRE OR SHIELD / STRIP WIRE OR JACKET 2	TIN	2	TERMINATION SPEC. 1 ITEM NO.	NO.	CIRCUIT POINT	CUT WIRE OR SHIELD / STRIP WIRE OR JACKET 2	TIN	2	TERMINATION SPEC 1 ITEM NO.	NO.	
BB 67L	1		J13-S3	138	N				J14-S5	138	N				
BB 67R	1		J13-S1	138	N				J14-S2	138	N				
BB 67W	1		J13-R1	138	N				J14-R2	138	N				
BB 68	1		J13-P6	138	N				J14-P6	138	N				
BB 69	1		J13-D1	138	N				J15-L4	138	N				
BB 70	1		J13-F1	138	N				J15-M4	138	N				
BB 71	1		J13-D3	138	N				J15-L3	138	N				
BB 72	1		J13-F3	138	N				J15-M3	138	N				
BB 73	1		J13-C2	138	N				J14-B2	138	N				
BB 74	1		J13-R6	138	N				J14-R6	138	N				
BB 75	1		J14-F6	138	N				J15-L2	138	N				
BB 76	1		J14-G6	138	N				J15-M2	138	N				
BB 77	1		J14-H5	138	N				J15-K3	138	N				
BB 78	1		J14-S6	138	N				J15-S2	138	N				
BB 79L	1		J14-S4	138	N				J17-T5	138	N				
BB 79R	1		J14-S1	138	N				J17-L5	138	N				
BB 79W	1		J14-R1	138	N				J17-L4	138	N				
BB 80	1		J15-B3	138	N				J16-B7	138	N				

1 THE STD CONDUCTOR TERMINATION FIGURES ARE PER
2 DIMENSIONS ARE IN INCHES AND TWO PLACE DECIMALS.

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS
SIZE A
1021791
SCALE - NONE
REV LTR +
SHEET 10

WIRE LIST BB

CONDUCTOR			FROM						TO						ROUTING
NUMBER	ITEM NO.	INDIVIDUAL LENGTH 2	CIRCUIT POINT	CUT WIRE OR SHIELD / STRIP WIRE OR JACKET 2	TIN	2	TERMINATION SPEC. 1 ITEM NO.	NO.	CIRCUIT POINT	CUT WIRE OR SHIELD / STRIP WIRE OR JACKET 2	TIN	2	TERMINATION SPEC 1 ITEM NO.	NO.	
BB 81	1		J15-S2	138	N				J20-L1	138	N				
BB 82R	3		J15-A4	88	N				J16-B2	88	N				
BB 82W	3		J15-A5	88	N				J16-B1	88	N				
BB 83R	3		J15-A6	88	N				J16-B4	88	N				
BB 83W	3		J15-A7	88	N				J16-B3	88	N				
BB 84R	3		J15-A8	88	N				J16-B6	88	N				
BB 84W	3		J15-A9	88	N				J16-B5	88	N				
BB 85R	1		J15-S1	138	N				J16-L2	138	N				
BB 85W	1		J15-H4	138	N				J16-L1	138	N				
BB 86R	1		J15-P6	138	N				J16-S4	138	N				
BB 86W	1		J15-P5	138	N				J16-S3	138	N				
BB 87	1		J15-S6	138	N				J16-S2	138	N				
BB 88	1		J15-K3	138	N				J16-N4	138	N				
BB 89R	1		J16-P5	138	N				J18-T1	138	N				
BB 89W	1		J16-N5	138	N				J18-S1	138	N				
BB 90	1		J16-S5	138	N				J20-P5	138	N				
BB 91	1		J16-S6	138	N				J20-P6	138	N				
BB 92R	1		J16-P6	138	N				J20-H6	138	N				

1 THE STD CONDUCTOR TERMINATION FIGURES ARE PER
2 DIMENSIONS ARE IN INCHES AND TWO PLACE DECIMALS.

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS
SIZE A
1021791
SCALE - NONE
REV LTR +
SHEET 11

WIRE LIST BB

CONDUCTOR			FROM						TO						ROUTING
NUMBER	ITEM NO.	INDIVIDUAL LENGTH 2	CIRCUIT POINT	CUT WIRE OR SHIELD / STRIP WIRE OR JACKET 2	TIN	2	TERMINATION SPEC. 1 ITEM NO.	NO.	CIRCUIT POINT	CUT WIRE OR SHIELD / STRIP WIRE OR JACKET 2	TIN	2	TERMINATION SPEC 1 ITEM NO.	NO.	
BB 92W	1		J16-N6	138	N				J20-H5	138	N				
BB 93	1		J16-S2	138	N				J20-L2	138	N				
BB 94	4			300		275	7 5			300		275	5		
BB 94B	1		E4	20	N				SHLD BB 94	20	N				
BB 94L			J16-M4	163	N				J12-D2	138	N				
BB 94R			J16-L4	163	N				J12-D1	138	N				
BB 94W			J16-L3	163	N				J12-F1	138	N				
BB 95	1		J16-N4	138	N				J17-L6	138	N				
BB 96	1		J16-S5	138	N				J16-S6	138	N				
BB 97R	1		J16-S4	138	N				J20-F9	138	N				
BB 97W	1		J16-S3	138	N				J20-F8	138	N				
BB100	1		J17-L6	138	N				J18-P4	138	N				
BB101L	1		J17-G6	138	N				J18-G6	138	N				
BB101R	1		J17-K6	138	N				J18-K6	138	N				
BB101W	1		J17-H6	138	N				J18-H6	138	N				
BB102	1		J17-T4	138	N				J20-M1	138	N				
BB103	1		J17-T3	138	N				J20-M2	138	N				
BB104	1		J17-T1	138	N				J20-R3	138	N				

1 THE STD CONDUCTOR TERMINATION FIGURES ARE PER
2 DIMENSIONS ARE IN INCHES AND TWO PLACE DECIMALS.

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS
SIZE A
1021791
SCALE - NONE
REV LTR +
SHEET 12

WIRE LIST BB

CONDUCTOR			FROM					TO					
NUMBER	ITEM NO.	INDIVIDUAL LENGTH 2	CIRCUIT POINT	CUT WIRE OR SHIELD / STRIP WIRE OR JACKET 2	TIN	TERMINATION SPEC. 1 ITEM NO.	NO.	CIRCUIT POINT	CUT WIRE OR SHIELD / STRIP WIRE OR JACKET 2	TIN	TERMINATION SPEC 1 ITEM NO.	NO.	ROUTING
BB105	1		J17-T2	138	N			J20-R4	138	N			
BB106	1		J17-R5	138	N			J20-M5	138	N			
BB107L	1		J17-G4	138	N			J18-G4	138	N			
BB107R	1		J17-K4	138	N			J18-K4	138	N			
BB107W	1		J17-H4	138	N			J18-H4	138	N			
BB110	1		J17-T1	138	N			J17-T2	138	N			
BB111	1		J17-T6	138	N			J20-N6	138	N			
BB112	3		J17-A9	88	N			J17-B9	88	N			
BB113	1		J17-S1	138	N			J17-S2	138	N			
BB114	1		J18-T2	138	N			J20-N6	138	N			
BB115	1		J18-P4	138	N			J19-R4	138	N			
BB116	1		J18-R1	138	N			J19-R6	138	N			
BB117R	1		J18-T1	138	N			J19-T6	138	N			
BB117W	1		J18-S1	138	N			J19-S6	138	N			
BB118R	1		J18-G1	138	N			J19-G6	138	N			
BB118W	1		J18-G2	138	N			J19-G5	138	N			
BB119R	1		J18-K1	138	N			J19-K6	138	N			
BB119W	1		J18-H1	138	N			J19-H6	138	N			

1 THE STD CONDUCTOR TERMINATION FIGURES ARE PER

2 DIMENSIONS ARE IN INCHES AND TWO PLACE DECIMALS.

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS
SIZE A
1021791
SCALE - NONE
REV LTR +
SHEET 13

WIRE LIST BB

CONDUCTOR			FROM					TO					
NUMBER	ITEM NO.	INDIVIDUAL LENGTH 2	CIRCUIT POINT	CUT WIRE OR SHIELD / STRIP WIRE OR JACKET 2	TIN	TERMINATION SPEC. 1 ITEM NO.	NO.	CIRCUIT POINT	CUT WIRE OR SHIELD / STRIP WIRE OR JACKET 2	TIN	TERMINATION SPEC 1 ITEM NO.	NO.	ROUTING
BB120	3		J18-D7	88	N			J18-D8	88	N			
BB121	3		J18-D8	88	N			J18-D9	88	N			
BB122	3		J18-D7	88	N			J18-L1	163	N			
BB123	1		J18-L1	138	N			J18-L2	138	N			
BB124	1		J18-L2	138	N			J18-L3	138	N			
BB125	1		J18-L3	138	N			J18-L4	138	N			
BB126	1		J18-L4	138	N			J18-L5	138	N			
BB127	1		J18-L5	138	N			J18-L6	138	N			
BB128	1		J18-R4	138	N			J18-R5	138	N			
BB129	1		J18-R5	138	N			J18-R6	138	N			
BB130	1		J18-R4	138	N			J18-S3	138	N			
BB131	1		J18-L1	138	N			J19-L6	138	N			
BB132R	3		J19-K5	163	N			J20-D8	88	N			
BB132W	3		J19-H5	163	N			J20-C8	88	N			
BB133R	3		J19-G4	163	N			J20-D9	88	N			
BB133W	3		J19-H4	163	N			J20-C9	88	N			
BB134	1		J19-R4	138	N			J20-M4	138	N			
BB135	1		J19-L1	138	N			J20-B8	138	N			

1 THE STD CONDUCTOR TERMINATION FIGURES ARE PER

2 DIMENSIONS ARE IN INCHES AND TWO PLACE DECIMALS.

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS
SIZE A
1021791
SCALE - NONE
REV LTR +
SHEET 14

WIRE LIST BB

CONDUCTOR			FROM					TO					
NUMBER	ITEM NO.	INDIVIDUAL LENGTH 2	CIRCUIT POINT	CUT WIRE OR SHIELD / STRIP WIRE OR JACKET 2	TIN	TERMINATION SPEC. 1 ITEM NO.	NO.	CIRCUIT POINT	CUT WIRE OR SHIELD / STRIP WIRE OR JACKET 2	TIN	TERMINATION SPEC 1 ITEM NO.	NO.	ROUTING
BB136	1		J19-L1	138	N			J19-L2	138	N			
BB137	1		J19-L2	138	N			J19-L3	138	N			
BB138	1		J19-L3	138	N			J19-L4	138	N			
BB139	1		J19-L4	138	N			J19-L5	138	N			
BB140	1		J19-L5	138	N			J19-L6	138	N			
BB141	1		J19-R1	138	N			J19-R2	138	N			
BB142	1		J19-R2	138	N			J19-R3	138	N			
BB143	1		J19-R3	138	N			J19-S4	138	N			
BB144	1		J19-S4	138	N			J19-S5	138	N			
BB145	1		J20-G4	138	N			J20-G5	138	N			
BB146	1		J20-K6	138	N			J20-L6	138	N			
BB147	1		J20-K5	138	N			J20-L5	138	N			
BB148	1		J20-P1	138	N			J20-T1	138	N			
BB149	1		J20-R1	138	N			J20-S1	138	N			
BB150	1		J20-P2	138	N			J20-T2	138	N			
BB151	1		J20-R2	138	N			J20-S2	138	N			
BB152	1		J20-M1	138	N			J20-N1	138	N			
BB153	1		J20-N1	138	N			J20-N2	138	N			

1 THE STD CONDUCTOR TERMINATION FIGURES ARE PER

2 DIMENSIONS ARE IN INCHES AND TWO PLACE DECIMALS.

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS
SIZE A
1021791
SCALE - NONE
REV LTR +
SHEET 15

WIRE LIST BB

CONDUCTOR			FROM					TO					
NUMBER	ITEM NO.	INDIVIDUAL LENGTH 2	CIRCUIT POINT	CUT WIRE OR SHIELD / STRIP WIRE OR JACKET 2	TIN	TERMINATION SPEC. 1 ITEM NO.	NO.	CIRCUIT POINT	CUT WIRE OR SHIELD / STRIP WIRE OR JACKET 2	TIN	TERMINATION SPEC 1 ITEM NO.	NO.	ROUTING
BB154	1		J20-M2	138	N			J20-N2	138	N			
BB155	1		J20-S3	138	N			J20-T3	138	N			
BB156	1		J20-S4	138	N			J20-T4	138	N			
BB157	1		J20-R5	138	N			J20-T5	138	N			
BB158	1		J20-R5	138	N			J20-S5	138	N			
BB159	1		J20-R6	138	N			J20-T6	138	N			
BB160	1		J20-R6	138	N			J20-S6	138	N			
BB161	1		J20-H1	138	N			J20-K1	138	N			
BB162	1		J20-K1	138	N			J20-K2	138	N			

1 THE STD CONDUCTOR TERMINATION FIGURES ARE PER

2 DIMENSIONS ARE IN INCHES AND TWO PLACE DECIMALS.

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS
SIZE A
1021791
SCALE - NONE
REV LTR +
SHEET 16

TDRR 16218

APPLICATION		REVISIONS			
NEXT ASSY	USED ON	SYM	DESCRIPTION	DATE	APPROVAL
			INITIAL CLASS A RELEASE PER TDRR 16218	2/3/65	WK.
		A	REPLACED WITH CHANGE BY REV B PER TDRR 20549	3 JULY 65	WJR

Ⓐ REPLACED WITH CHANGE BY REV B

REV STATUS OF SHEETS						
REV	A	+	+	+	+
SHEET	1	2	3	4	5

AC SPARK PLUG DIVISION, GMC
MILWAUKEE, WISCONSIN

ACSP PN

DRAWN 29 DEC 64 DATE
CHECKED C. Piojda 15 JAN 65
APPROVAL 19 JAN 65
APPROVAL 19 JAN 65
NASA APPROVAL
MA APPROVAL 3 Feb 65
CONTRACT NAS 9-497

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

WIRE LIST AA
AGE INTERCONNECT

CODE IDENT NO.
SIZE A
1021792
REV A

SCALE —
SHEET 1 OF 5

TDRR 16218

REVISIONS

SYM	DESCRIPTION	DATE	APPROVAL
	INITIAL CLASS A RELEASE PER TDRR 16218	2/3/65	WK.

APPLICATION

NEXT ASSY	USED ON

REV					
SHEET					
REV STATUS REV	+	+	+	+	+
OF SHEETS SHEET	1	2	3	4	5

AC SPARK PLUG DIVISION, GMC
MILWAUKEE, WISCONSIN

ACSP PN

DRAWN R. L. [illegible] 29 DEC 64 DATE
CHECKED C. Pizzida 15 JAN 65
APPROVAL D. Barten 19 JAN 65
APPROVAL [illegible] 19 JAN 65
NASA APPROVAL K. [illegible] 2/3/65
MSC APPROVAL W. [illegible] 3 FEB 65
CONTRACT NAS 9-497

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

WIRE LIST AA
AGE INTERCONNECT

CODE IDENT NO. SIZE A 1021792 REV +

SCALE — SHEET 1 OF 5

WIRE LIST AA

GENERAL NOTES

1 SEE CONDUCTOR CHART, PENNANT NOTE 1.

2 SEE CONDUCTOR CHART, PENNANT NOTE 2.

3 INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327.

4 Y OR N IN TINNED COLUMN INDICATES YES OR NO.

5 PARTIAL CIRCUIT POINTS ARE SHOWN. PREFIX WITH UNIT NUMBER 56 FOR COMPLETE CIRCUIT POINT

TOLERANCE CHART, UNLESS OTHERWISE SPECIFIED ---

APPLICABLE LENGTH FOR WIRE OR CABLE, STRIP WIRE, STRIP JACKET, CUT WIRE OR CUT SHIELD.	TOLERANCE WIRE OR CABLE	STRIP WIRE	STRIP JACKET	CUT WIRE	CUT SHIELD
UNDER 1 INCH	+ .06-.00	+.03-.00	+.06-.06	+.06-.06	+.06-.06
1 INCH TO 6 INCHES	+ .50-.00	+.06-.00	+.25-.25	+.25-.25	+.25-.25
6 INCHES TO 6 FEET	+1.00-.00		+.50-.50	+.50-.50	+.50-.50
OVER 6 FEET	+2.00-.00				

MANNED SPACECRAFT CENTER HOUSTON, TEXAS — SIZE A — 1021792
SCALE - NONE — REV LTR + — SHEET 2

MIL 2084-4-64

WIRE LIST AA

LIST OF MATERIALS

NOTE	ITEM	QTY	PART NO	DESCRIPTION
	1	1	1021792-001	WIRE PER 1010807-5 24AWG WHITE 16 FEET 2.5 INCHES TOTAL LENGTH

MANNED SPACECRAFT CENTER HOUSTON, TEXAS — SIZE A — 1021792
SCALE - NONE — REV LTR + — SHEET 3

MIL 2084-4-64

WIRE LIST AA

CONDUCTOR NUMBER	ITEM NO.	INDIVIDUAL LENGTH 2	FROM CIRCUIT POINT	CUT WIRE OR SHIELD / STRIP WIRE OR JACKET 2	TIN	TERMINATION SPEC. 1 ITEM NO.	NO.	TO CIRCUIT POINT	CUT WIRE OR SHIELD / STRIP WIRE OR JACKET 2	TIN	TERMINATION SPEC 1 ITEM NO.	NO.	ROUTING
AA 1	1		TB1-A12	138	N			TB1-B17	138	N			HH
AA 2	1		TB1-A17	138	N			TB1-C24	138	N			HH25
AA 3	1		TB1-A39	138	N			TB1-B36	138	N			HH
AA 4	1		TB1-A42	138	N			TB1-B39	138	N			HH
AA 5	1		TB1-A47	138	N			TB1-B42	138	N			HH
AA 6	1		TB1-A67	138	N			TB1-B47	138	N			HH
AA 7	1		TB1-B 4	138	N			TB1-D 3	138	N			4
AA 8	1		TB1-B62	138	N			TB1-D 4	138	N			62FF
AA 9	1		TB1-B67	138	N			TB1-D76	138	N			GG76
AA 10	1		TB1-B68	138	N			TB1-C62	138	N			GG
AA 11	1		TB1-B70	138	N			TB1-K20	138	N			GG21
AA 12	1		TB1-D59	138	N			TB1-F74	138	N			EE
AA 13	1		TB1-D73	138	N			TB1-F73	138	N			
AA 14	1		TB1-D73	138	N			TB1-G20	138	N			73DD
AA 15	1		TB1-D74	138	N			TB1-H25	138	N			74CC
AA 16	1		TB1-D75	138	N			TB1-K25	138	N			75BB
AA 17	1		TB1-D77	138	N			TB1-F77	138	N			
AA 18	1		TB1-F56	138	N			TB1-F76	138	N			DD

1 THE STD CONDUCTOR TERMINATION FIGURES ARE PER

2 DIMENSIONS ARE IN INCHES AND TWO PLACE DECIMALS.

MANNED SPACECRAFT CENTER HOUSTON, TEXAS — SIZE A — 1021792
SCALE - NONE — REV LTR + — SHEET 4

MIL 2085-4-64 WIR

WIRE LIST AA

CONDUCTOR			FROM					TO					
INDIVIDUAL LENGTH			CUT WIRE OR SHIELD			TERMINATION		CUT WIRE OR SHIELD			TERMINATION		
NUMBER	ITEM NO.	2	STRIP WIRE OR JACKET CIRCUIT POINT	2	TIN	SPEC. 1 ITEM NO.	NO.	STRIP WIRE OR JACKET CIRCUIT POINT	2	TIN	SPEC 1 ITEM NO.	NO.	ROUTING
AA 19	1		TB1-F74	138	N			TB1-H24	138	N			EE25
AA 20	1		TB1-G 4	138	N			TB1-G 8	138	N			CC
AA 21	1		TB1-G24	138	N			TB1-G27	138	N			CC
AA 22	1		TB1-H12	138	N			TB1-K17	138	N			BB
AA 23	1		TB1-H17	138	N			TB1-K24	138	N			BB
AA 24	1		TB1-H30	138	N			TB1-H32	138	N			BB
AA 25	1		TB1-H39	138	N			TB1-K36	138	N			CC37
AA 26	1		TB1-H42	138	N			TB1-K39	138	N			CC40
AA 27	1		TB1-H47	138	N			TB1-K42	138	N			CC43
AA 28	1		TB1-H67	138	N			TB1-K47	138	N			CC48
AA 29	1		TB1-K30	138	N			TB1-K32	138	N			BB

1 THE STD CONDUCTOR TERMINATION FIGURES ARE PER

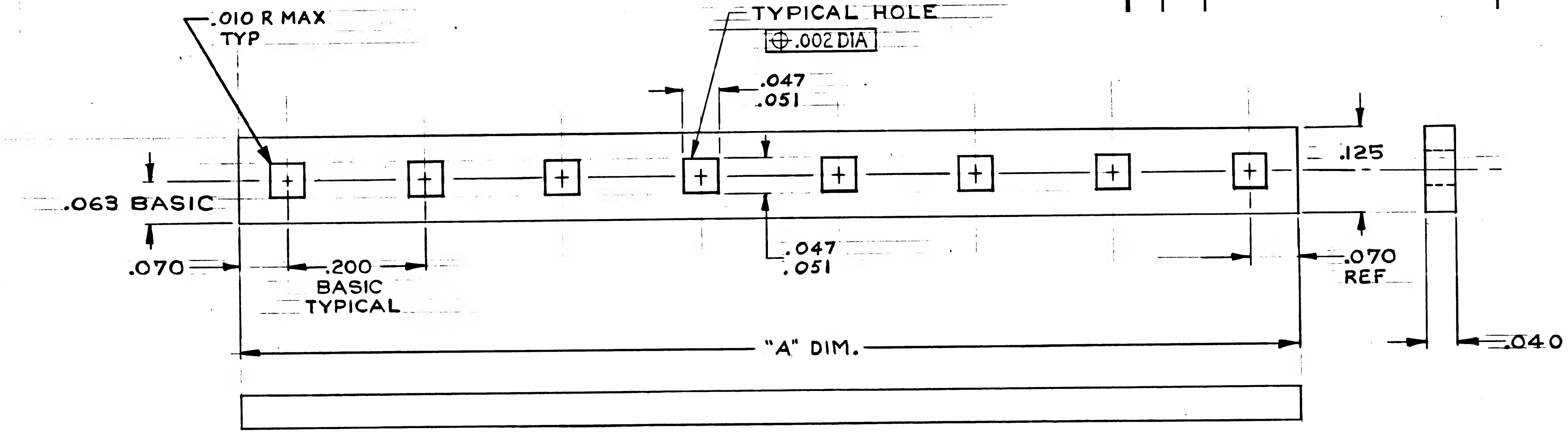
2 DIMENSIONS ARE IN INCHES AND TWO PLACE DECIMALS.

MANNED SPACECRAFT CENTER HOUSTON, TEXAS	SIZE A	1021792
SCALE - NONE	REV LTR +	SHEET 5

MIL 2085-4-64 WIR

REVISIONS 16218					
SYM	ZONE	DESCRIPTION	CHG NO.	DATE	APPD.
		INITIAL RELEASE CLASS A PER TDRR 16218		2/3/65	WK

NOTES:
1. INTERPRET DWG IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. MATERIAL: BERYLLIUM COPPER ALLOY STRIP, PER QQ-C-533, COND A.
3. REMOVE ALL BURRS, .005 TO .010 RAD. OR CHAMFER.
4. SURFACE ROUGHNESS NOT TO EXCEED 125√.
5. IDENTIFY USING DWG NO. PER ND1002019.



PART NO.	NO. OF HOLES	"A" DIM.
-001	2	.340
-002	3	.540
-003	4	.740
-004	5	.940
-005	6	1.140
-006	7	1.340
-007	8	1.540

1007583	
NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± — DECIMALS ±.005 ANGLES ± —
DO NOT SCALE THIS DRAWING
MATERIAL SEE NOTE 2
CONTRACT NAS9-497

AC SPARK PLUG DIVISION, GMC
MILWAUKEE, WISCONSIN
ACSP PN
DRAWN J.P. Barth III DATE 21 DEC 64
CHECKED R.P. Kongo 1 Feb 65
APPROVAL J.J. Nevin 2/2/65
APPROVAL
NASA APPROVAL 2/3/65
MIT APPROVAL W Kupfer 3 Feb 65

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

BUSS BAR

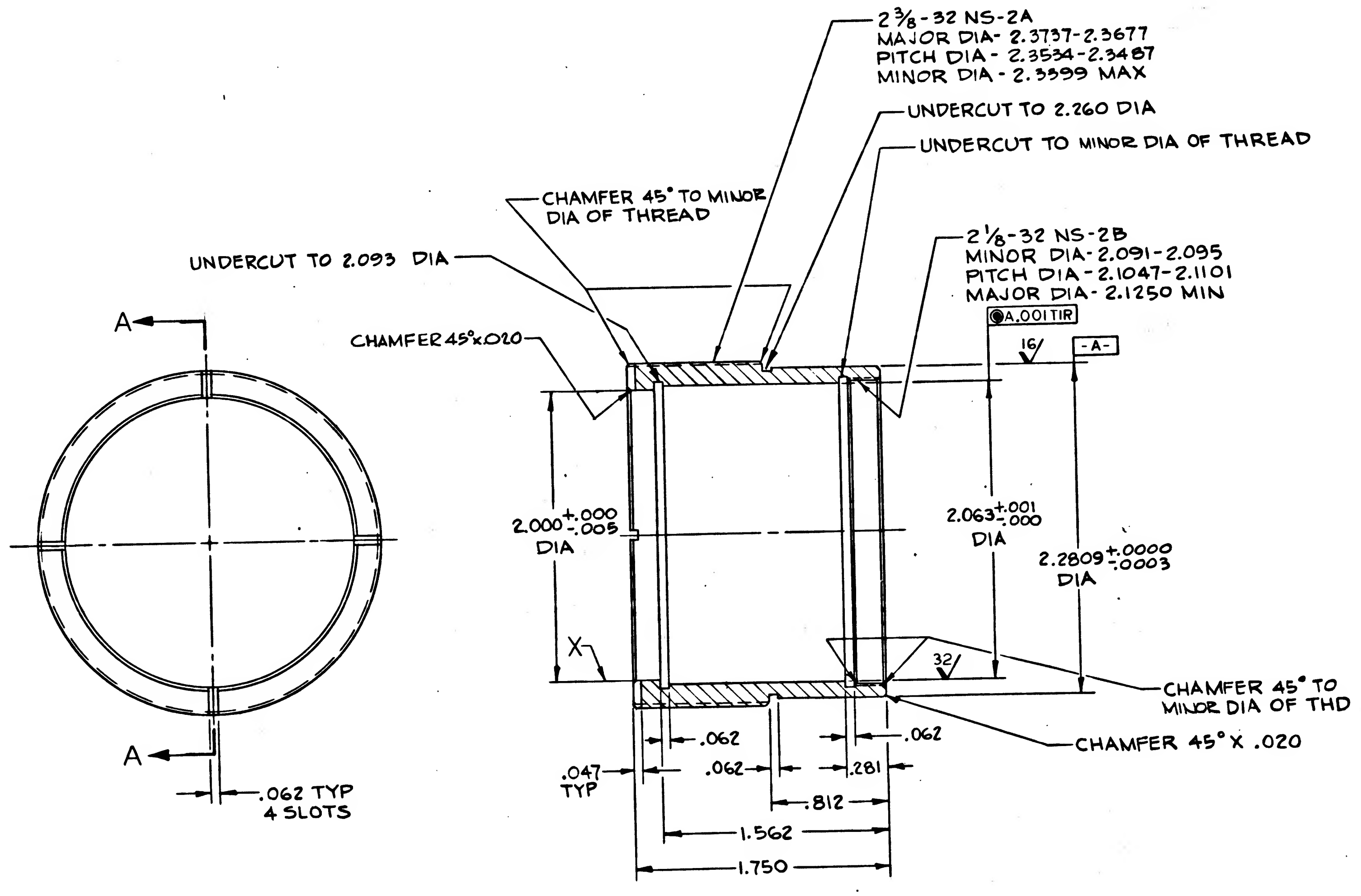
CODE IDENT NO.
SIZE C
1021799
SCALE —
SHEET 1 OF 1

MIL 1077C—P

REVISIONS				
SYM	ZONE	DESCRIPTION	DATE	APPROVAL
—	—	CLASS A RELEASE PER TDRR21729		

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH MIL-D-70327
2. GENERAL MACHINING STANDARDS IN ACCORDANCE WITH ND1002078
3. REMOVE BURRS PER ND1002079
4. FINISH $\overset{125}{\vee}$ UNLESS OTHERWISE SPECIFIED.
5. BLACKEN PER MIL-C-13924, CLASS 3
6. APPLY ZINC CHROMATE PRIMER PER MIL-P-8585
   APPLY LUSTERLESS ENAMEL PER TT-E-527 COLOR NO. 37038 OF FED. STD NO. 595 TO SURFACES MARKED "X".
7. IDENTIFY USING NASA DRAWING NUMBER, REV LETTER AND MANUFACTURER'S SYMBOL PER ND1002019, (BAGGED OR TAGGED).



SECTION A-A

ITEM NO.	QTY REQD	SYM	GOVERNMENT/NASA NO.	KOLLSMAN PART NO.	CODE IDENT	NOMENCLATURE OR DESCRIPTION	MATERIAL	SPECIFICATION

LIST OF PARTS AND MATERIALS

NEXT ASSY	USED ON
1019900	1019977

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOL ON: FRACTIONS ± ~ ; DECIMALS ±.005 ; ANGLES ± 1°
DO NOT SCALE THIS DRAWING
MATERIAL ST STL AISI 416
FED. SPEC - QQ-S-763 CLASS 416 COND A
CONTRACT NAS9-497

KOLLSMAN INSTRUMENT CORPORATION
ELMHURST NEW YORK
KIC PN 03386910855
DRAWN AJ PERALTA DATE 2-23-65
CHECKED N. Kohn 3-13-65
APPROVAL W Wagner 3-17-65
APPROVAL
NASA APPROVAL
MIT APPROVAL

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

TITLE CELL, LENS

CODE IDENT NO. 89944
SIZE D
NASA NUMBER 1022002
SCALE 2/1
WEIGHT CALC ACTUAL
SHEET 1 OF 1

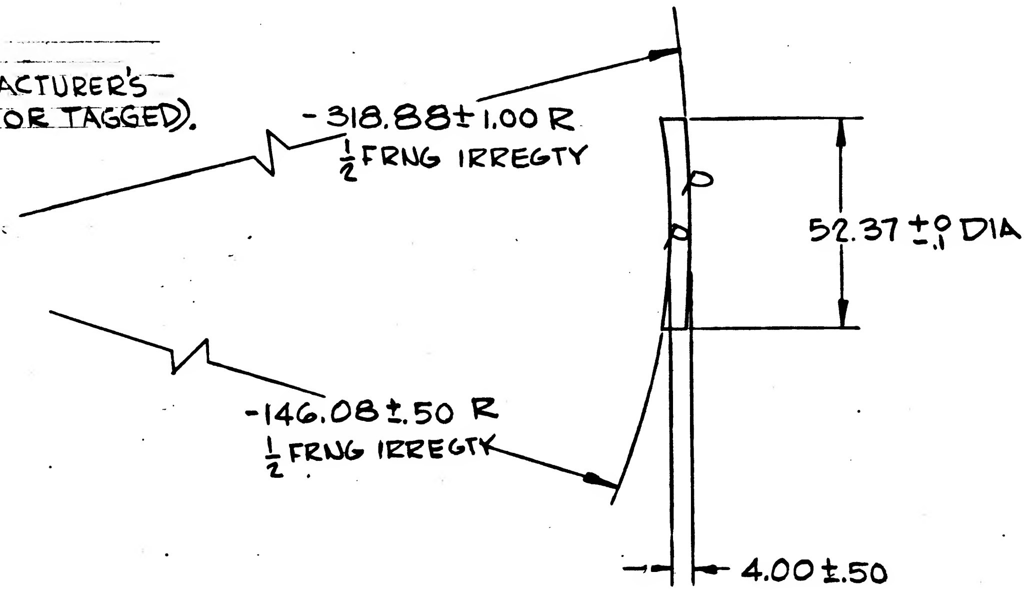
MASTER

AD-1380

REVISIONS 21729				
SYM	ZONE	DESCRIPTION	DATE	APPROVAL

NOTES:

1- INTERPRET DWG PER MIL-D-70327.
2a- ELEM IN ACCORD W/SPEC MIL-O-13830.
b- CA: ENT 46.81 M.M. EXIT = 46.05 M.M.
c- SURF QUAL: 60-40
d- CTRG ERROR 1 MINUTE MAX.
3- CHAM .5 ±.3 x 45° ALL EDGES
4- SURF. MKD "P" POL, ALL OTHERS GRD.
5- ACCURACY TO TEST PLATE 3 FRNGES.
- DIMENSIONS ARE MILLIMETERS UNLESS OTHERWISE SPECIFIED
6- MATERIAL: GLASS TYPE 616-366 GRADE B FINE ANNEALED PER MIL-G-174.
7- ALL SURFACES TO BE ANTI-RELECTION COATED IN ACCORDANCE WITH MIL-C-675
8- IDENTIFY USING NASA DRAWING NO. REVISION LETTER AND MANUFACTURER'S SYMBOL PER ND1002019 (BAGGED OR TAGGED).



MASTER

ITEM NO.	QTY REQD	SYM	GOVERNMENT/NASA NO.	KOLLSMAN PART NO.	CODE IDENT	NOMENCLATURE OR DESCRIPTION	MATERIAL	SPECIFICATION	UNIT WT

LIST OF PARTS AND MATERIALS

NEXT ASSY	USED ON
1019900	1019977

APPLICATION

UNLESS OTHERWISE SPECIFIED

TOL ON	FRACTIONS	DECIMALS	ANGLES
	± ~	± ~	± ~

DO NOT SCALE THIS DRAWING

MATERIAL: SEE NOTE 10

CONTRACT: NAS 9-497

KOLLSMAN INSTRUMENT CORPORATION
ELMHURST NEW YORK

KIC PN 03386910381

DRAWN T. LOMNITZ DATE 1-27-65
CHECKED EARL SARGATZ 1-29-65
APPROVAL 1-29-65
APPROVAL
NASA APPROVAL
MIT APPROVAL

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

TITLE: LENS, OPTICAL INSTRUMENT, OBJECTIVE

CODE IDENT NO.	SIZE	NASA NUMBER
89944	C	1022004

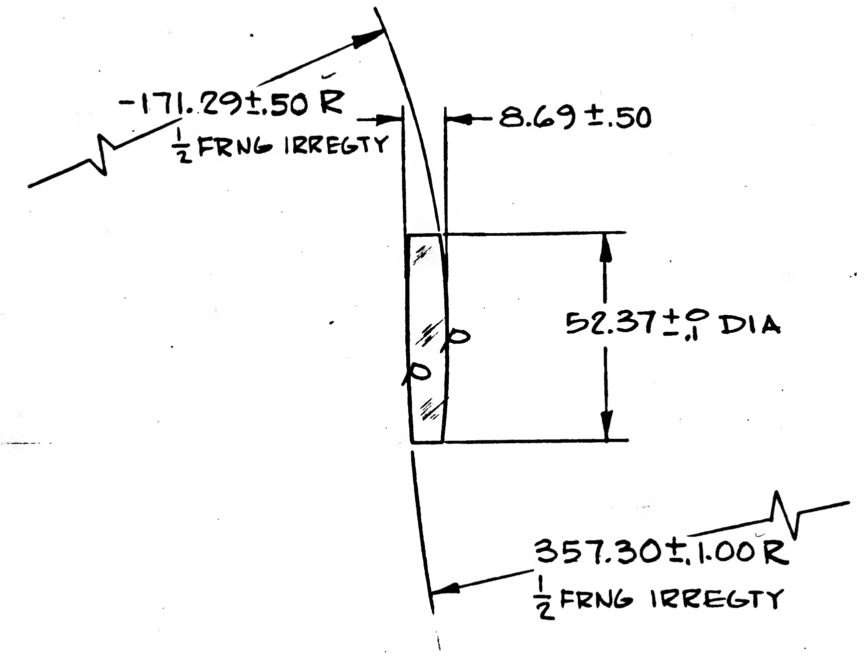
SCALE 1/1 WEIGHT CALC ACTUAL SHEET 1 OF 1

SYM	ZONE	DESCRIPTION	DATE	APPROVAL

REVISIONS 21729

NOTES:
1- INTERPRET DWG PER MIL-D-70327.
2a- ELEM IN ACCORD W/SPEC MIL-O-13830.
b- CA: ENT 50.00MM, EXIT=49.21 MM
c- SURF. QUAL: 60-40
d- CTRG ERROR 1′ MINUTE MAX.
3- CHAM .5±.3×45° ALL EDGES
4- SURF. MKD "P" POL, ALL OTHERS GRD.
5- ACCURACY TO TEST PLATE 3 FRNGES
6- DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED.
7- MATERIAL- DYNASIL OPTICAL QUALITY FUSED SILICA PER MIL-G-174

8- ALL SURFACES TO BE ANTI-REFLECTION COATED IN ACCORDANCE WITH MIL-C-675
9- IDENTIFY USING NASA DRAWING NO., REVISION LETTER AND MANUFACTURER'S SYMBOL PER ND1002019 (BAGGED OR TAGGED).



MASTER

ITEM NO.	QTY REQD	SYM	GOVERNMENT/NASA NO.	KOLLSMAN PART NO.	CODE IDENT	NOMENCLATURE OR DESCRIPTION	MATERIAL	SPECIFICATION	UNIT WT

LIST OF PARTS AND MATERIALS

NEXT ASSY	USED ON
1019900	1019977

APPLICATION

UNLESS OTHERWISE SPECIFIED
TOL ON: FRACTIONS ± ~ DECIMALS ± ~ ANGLES ± ~
DO NOT SCALE THIS DRAWING
MATERIAL
SEE NOTE 10
CONTRACT
NAS 9-497

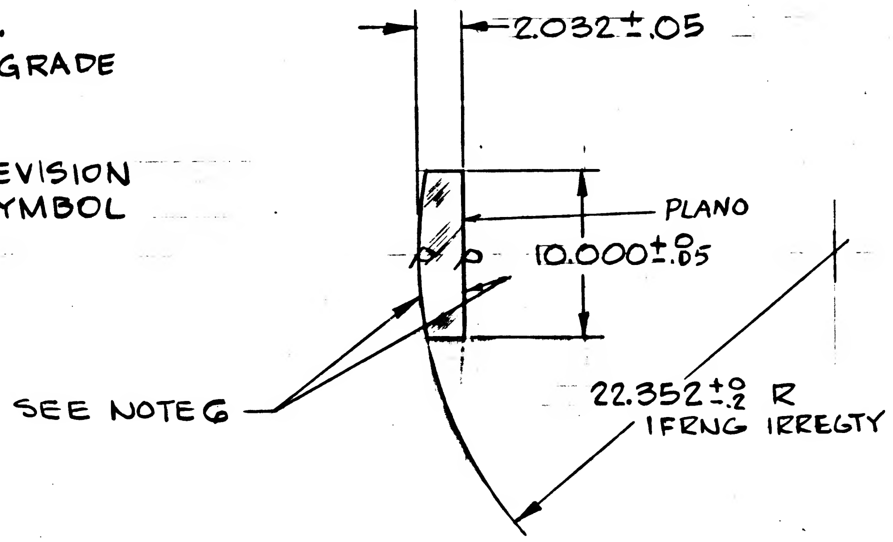
KOLLSMAN INSTRUMENT CORPORATION
ELMHURST NEW YORK
KIC PN 03386910382
DRAWN T. LOMNITZ DATE 1-27-65
CHECKED EARL SARGATZ 1-29-65
APPROVAL 1-29-65
APPROVAL
NASA APPROVAL
MIT APPROVAL

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS
TITLE
LENS, OPTICAL INSTRUMENT, OBJECTIVE
CODE IDENT NO. 89944
SIZE C
NASA NUMBER 1022006
SCALE 1/1
WEIGHT CALC ACTUAL
SHEET 1 OF 1

SYM	ZONE	DESCRIPTION	DATE	APPROVAL

REVISIONS 21729

NOTES:
1. INTERPRET DWG PER MIL-D-70327.
2a. ELEM IN ACCORD W/SPEC MIL-O-13830
   b. CA ENT 8.00 MM, EXIT 8.00 MM
   c. SURF QUAL: 60-40
   d. CTRG ERROR 3 MINUTES MAX.
3. CHAM .5±.3 x 45° ALL EDGES.
4. SURF. MKD "P" POL, ALL OTHERS GRD.
5. ACCURACY TO TEST PLATE 5 FRNGES.
6. SURFACE COATED WITH REFLECTION REDUCING FILM FOR MAX. TRANSMISSION @ 5500 Å PER MIL SPEC MIL-C-675
7. DIMENSIONS ARE MILLIMETERS UNLESS OTHERWISE SPECIFIED.
8. MATERIAL: FUSED SILICA OPTICAL GRADE DYNASIL OR CORNING 7940 PER MIL-G-174.
9. IDENTIFY USING NASA DWG NO., REVISION LETTER AND MANUFACTURER'S SYMBOL PER ND1002019 (BAGGED).



MASTER

ITEM NO.	QTY REQD	SYM	GOVERNMENT/NASA NO.	KOLLSMAN PART NO.	CODE IDENT	NOMENCLATURE OR DESCRIPTION	MATERIAL	SPECIFICATION	UNIT WT

LIST OF PARTS AND MATERIALS

NEXT ASSY	USED ON
1019900	1019977

APPLICATION

UNLESS OTHERWISE SPECIFIED
TOL ON: FRACTIONS ± ~ DECIMALS ± ~ ANGLES ± ~
DO NOT SCALE THIS DRAWING
MATERIAL: SEE NOTE 11
CONTRACT: NAS 9-497

KOLLSMAN INSTRUMENT CORPORATION
ELMHURST NEW YORK
KIC PN 03386910514
DRAWN T. LOMNITZ DATE 2-8-65
CHECKED EARL SARCATZ 2-10-65
APPROVAL 2-10-65
APPROVAL
NASA APPROVAL
MIT APPROVAL

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

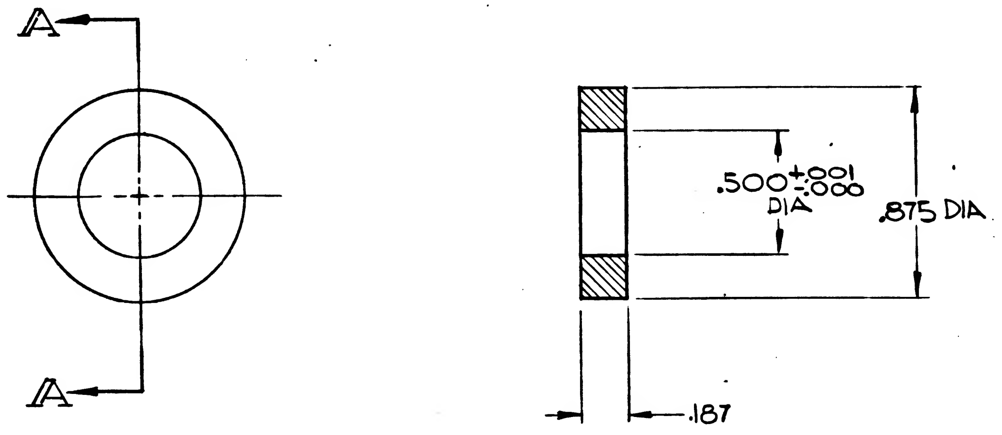
TITLE
LENS, OPTICAL INSTRUMENT
RELAY HORIZON

CODE IDENT NO. 89944
SIZE C
NASA NUMBER 1022032
SCALE 4/1
WEIGHT CALC ACTUAL
SHEET 1 OF 1

MASTER

REVISIONS 20458 6/2				
SYM	ZONE	DESCRIPTION	DATE	APPROVAL

NOTES:
1. INTERPRET DRAWING PER MIL-D-70327.
2. GENERAL MACHINING STANDARDS PER ND1002078
3. REMOVE BURRS PER ND1002079
4. FINISH $\overset{125}{\vee}$ UNLESS OTHERWISE SPECIFIED.
5. PASSIVATE PER MIL-STD-171 FINISH NO. 5.4.1
6. IDENTIFY USING NASA DWG NO. REVISION LETTER AND MANUFACTURERS SYMBOL PER ND1002019 (BAGGED OR TAGGED)



SECTION A-A

ITEM NO.	QTY REQD	SYM	GOVERNMENT/NASA NO.	KOLLSMAN PART NO.	CODE IDENT	NOMENCLATURE OR DESCRIPTION	MATERIAL	SPECIFICATION	UNIT WT

LIST OF PARTS AND MATERIALS

1022824	1019962
NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOL ON: FRACTIONS ± ~ ; DECIMALS ±.005 ; ANGLES ± ~
DO NOT SCALE THIS DRAWING
MATERIAL STAINLESS STEEL AISI 416
FED SPEC QQ-S-763 CLASS 416 COND. A
CONTRACT

KOLLSMAN INSTRUMENT CORPORATION
ELMHURST NEW YORK
KIC PN 03386910181
DRAWN B. WERTENTEIL DATE 4-6-65
CHECKED 4-6-65
APPROVAL 4-6-65
APPROVAL
NASA APPROVAL 6/21
MIT APPROVAL 6-28-65

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

TITLE SPACER

CODE IDENT NO. 89944
SIZE C
NASA NUMBER 1022081
SCALE 2:1
WEIGHT CALC ACTUAL
SHEET 1 OF 1

AD-1340

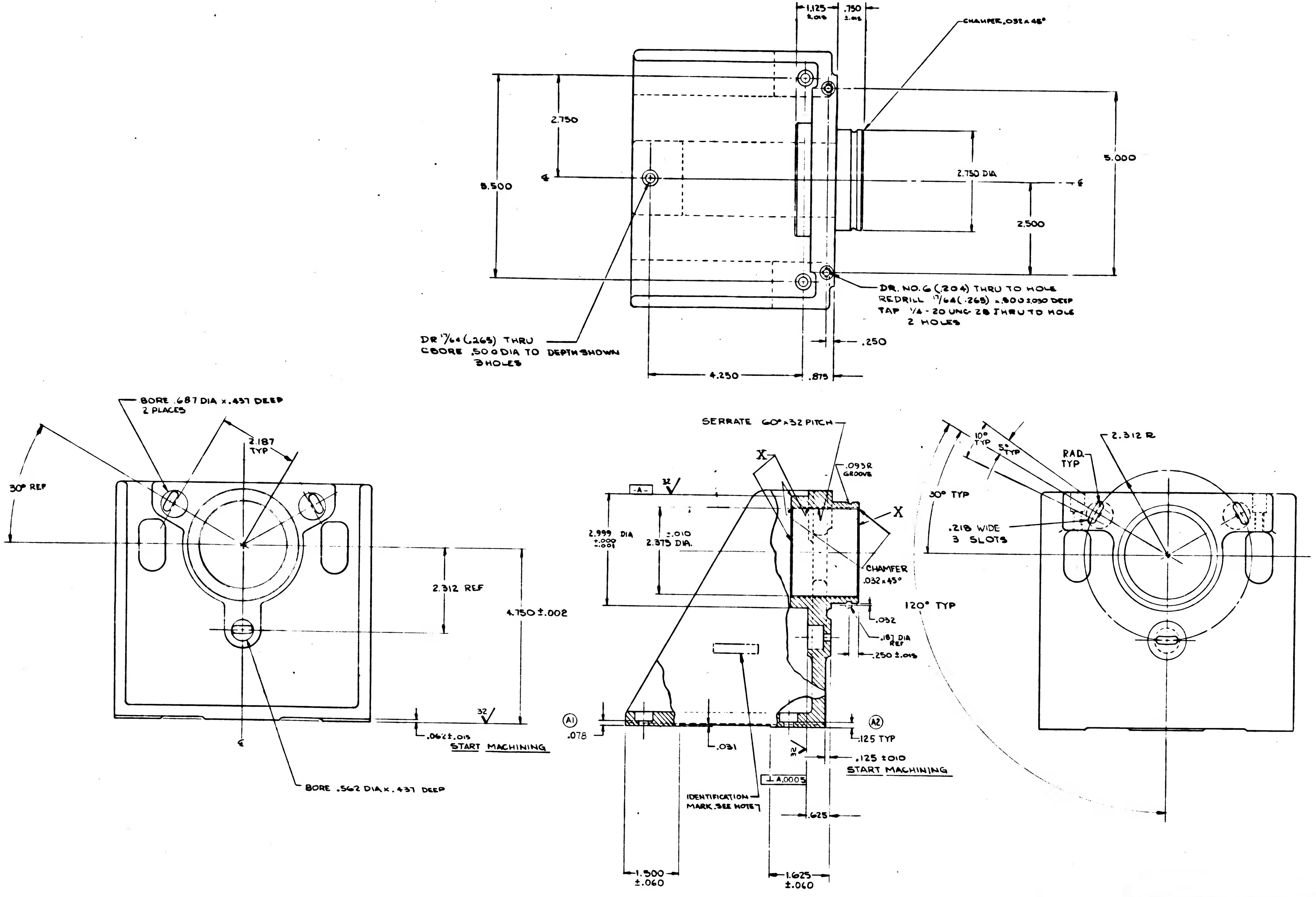
1022081

MASTER

REVISIONS				
SYM	ZONE	DESCRIPTION	DATE	APPROVAL
A		REVISED PER ECO 12 93 TDRR 23893 DATE 7-14-65		

NOTES:

1. INTERPRET DRAWING PER MIL-D-70327.
2. GENERAL MACHINING STANDARDS PER ND1002078
3. FINISH 125✓ UNLESS OTHERWISE SPECIFIED.
4. REMOVE BURRS PER ND1002079
5. MATERIAL USE CASTING, DRAWING NO. 1022124
6. FINISH: PREPARE ALL UNMACHINED SURFACES PER ND1002098
   APPLY THREE (3) COATS OF GRAY ENAMEL PER ND1002098 PARA 3.1.3
   ON SURFACES MARKED "X" APPLY ZINC CHROMATE PRIMER PER MIL-P-8585
   APPLY LUSTERLESS ENAMEL PER TT-E-527 COLOR NO. 37038 OF FED-STD-NO.595
7. IDENTIFY USING NASA DRAWING NO., REVISION LETTER AND MANUFACTURER'S SYMBOL PER ND1002019.



ITEM NO	QTY REQD	SYM	GOVERNMENT/NASA NO.	KOLLSMAN PART NO.	CODE IDENT	NOMENCLATURE OR DESCRIPTION	MATERIAL	SPECIFICATION	UNIT WT

LIST OF PARTS AND MATERIALS

NEXT ASSY	USED ON
1019919	1019962
1019919	1019926

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOL ON: FRACTIONS ± — ; DECIMALS ± .008 ; ANGLES ± 1°
DO NOT SCALE THIS DRAWING
MATERIAL: SEE NOTE 5
CONTRACT

KOLLSMAN INSTRUMENT CORPORATION
ELMHURST NEW YORK
KIC PN 033869108 01
DRAWN B. Pulver DATE 3-16-65
CHECKED B. Hertenteh 3-18-65
APPROVAL
APPROVAL
NASA APPROVAL
MIT APPROVAL

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

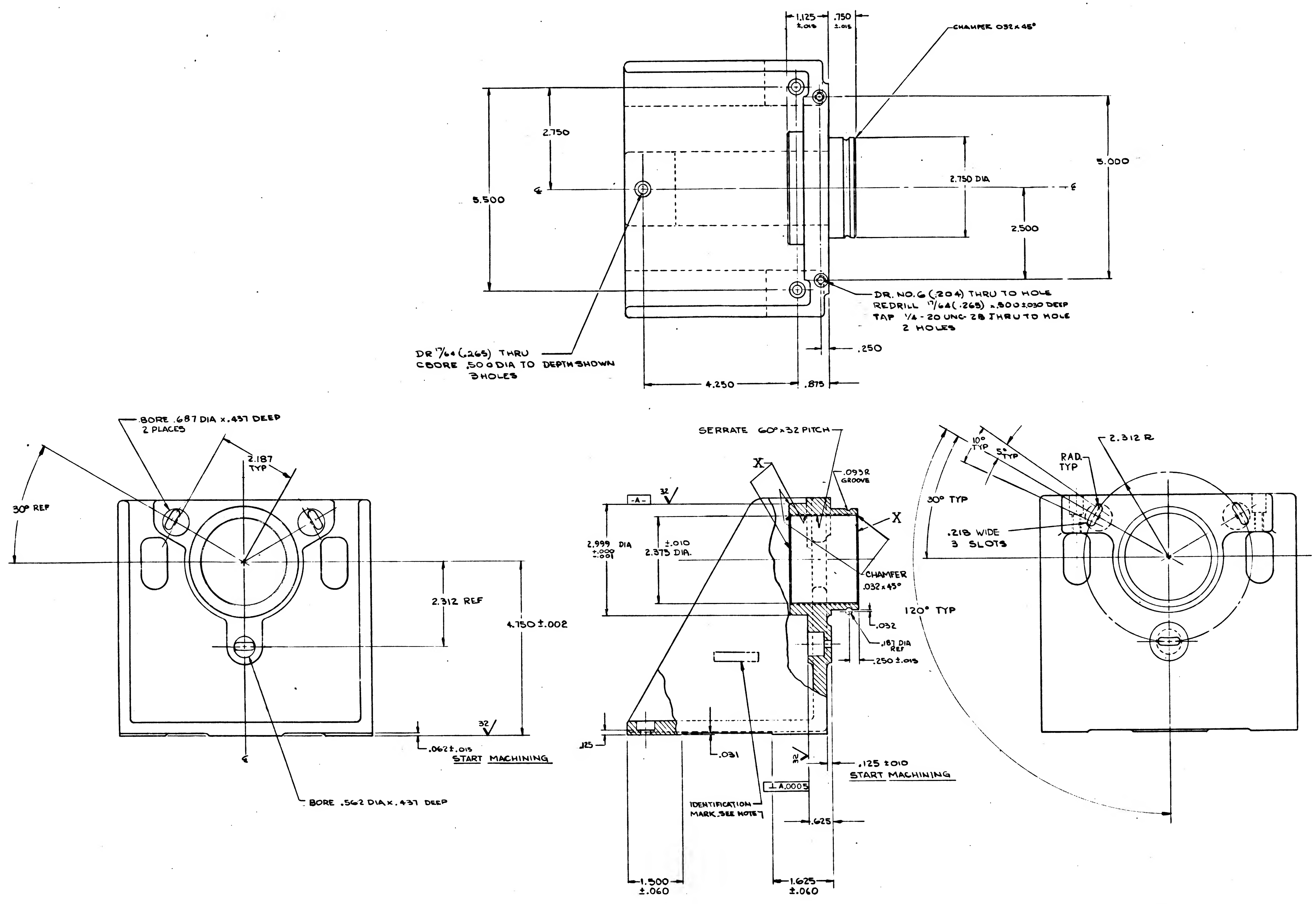
TITLE
SUPPORT, MIRROR MOUNT
(MACHINING)

CODE IDENT NO 89944
SIZE E
NASA NUMBER 1022123
SCALE 1/1
WEIGHT
CALC
ACTUAL
SHT OF

1022123 A

REVISIONS				
SYM	ZONE	DESCRIPTION	DATE	APPROVAL

NOTES:
1. INTERPRET DRAWING PER MIL-D-70327.
2. GENERAL MACHINING STANDARDS PER ND1002078
3. FINISH $^{125}\checkmark$ UNLESS OTHERWISE SPECIFIED
4. REMOVE BURRS PER ND1002079
5. MATERIAL USE CASTING, DRAWING NO. 1022124
6. FINISH: PREPARE ALL UNMACHINED SURFACES PER ND1002098
   APPLY THREE (3) COATS OF GRAY ENAMEL PER ND1002098 PARA 3.1.3
   ON SURFACES MARKED "X" APPLY ZINC CHROMATE PRIMER PER MIL-P-8585
   APPLY LUSTERLESS ENAMEL PER TT-E-527 COLOR NO. 37038 OF FED-STD-NO.595
7. IDENTIFY USING NASA DRAWING NO., REVISION LETTER AND MANUFACTURER'S SYMBOL PER ND1002019.



ITEM NO.	QTY REQD	SYM	GOVERNMENT/NASA NO.	KOLLSMAN PART NO.	CODE IDENT	NOMENCLATURE OR DESCRIPTION	MATERIAL	SPECIFICATION	UNIT WT

LIST OF PARTS AND MATERIALS

NEXT ASSY	USED ON
1019919	1019962
1019919	1019926

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES

TOL ON	FRACTIONS	DECIMALS	ANGLES
	± —	± .005	± 1°

DO NOT SCALE THIS DRAWING

MATERIAL
SEE NOTE 5

CONTRACT

KOLLSMAN INSTRUMENT CORPORATION
ELMHURST NEW YORK
KIC PN 0338691080I

DRAWN C. Pulver DATE 3-16-65
CHECKED B. Hertenten 3-18-65
APPROVAL [illegible] 3-16-65
APPROVAL
NASA APPROVAL [illegible] 11/65
MIT APPROVAL [illegible]

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

TITLE
SUPPORT, MIRROR MOUNT
(MACHINING)

CODE IDENT NO.	SIZE	NASA NUMBER
89944	E	1022123

SCALE 1:1 WEIGHT CALC ACTUAL SHEET OF 1

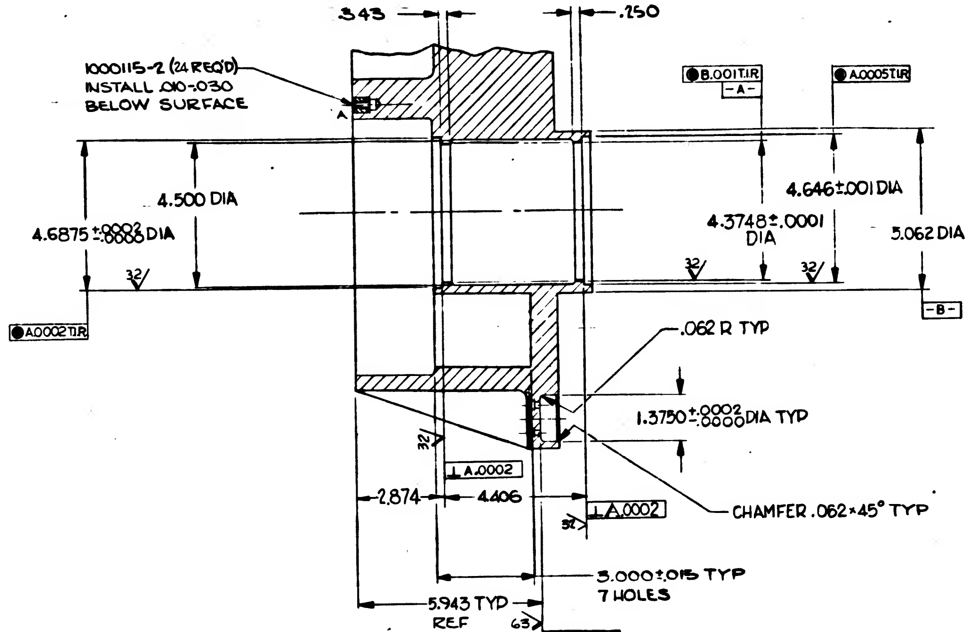
WA

NOTES
1- INTERPRET DRAWING PER MIL-D-70327
2- GENERAL MACHINING STANDARD PER ND1002078
3- FINISH 125/ UNLESS OTHERWISE SPECIFIED
4- REMOVE BURRS PER ND1002079
5- HEAT TREAT (STRESS RELIEVE & STABILIZE) PER ND1002092
6- MATERIAL: SEE DWG NO. 1022463
7- IDENTIFY USING NASA DWG NUMBER, REVISION LETTER AND MANUFACTURERS SYMBOL PER ND 1002019

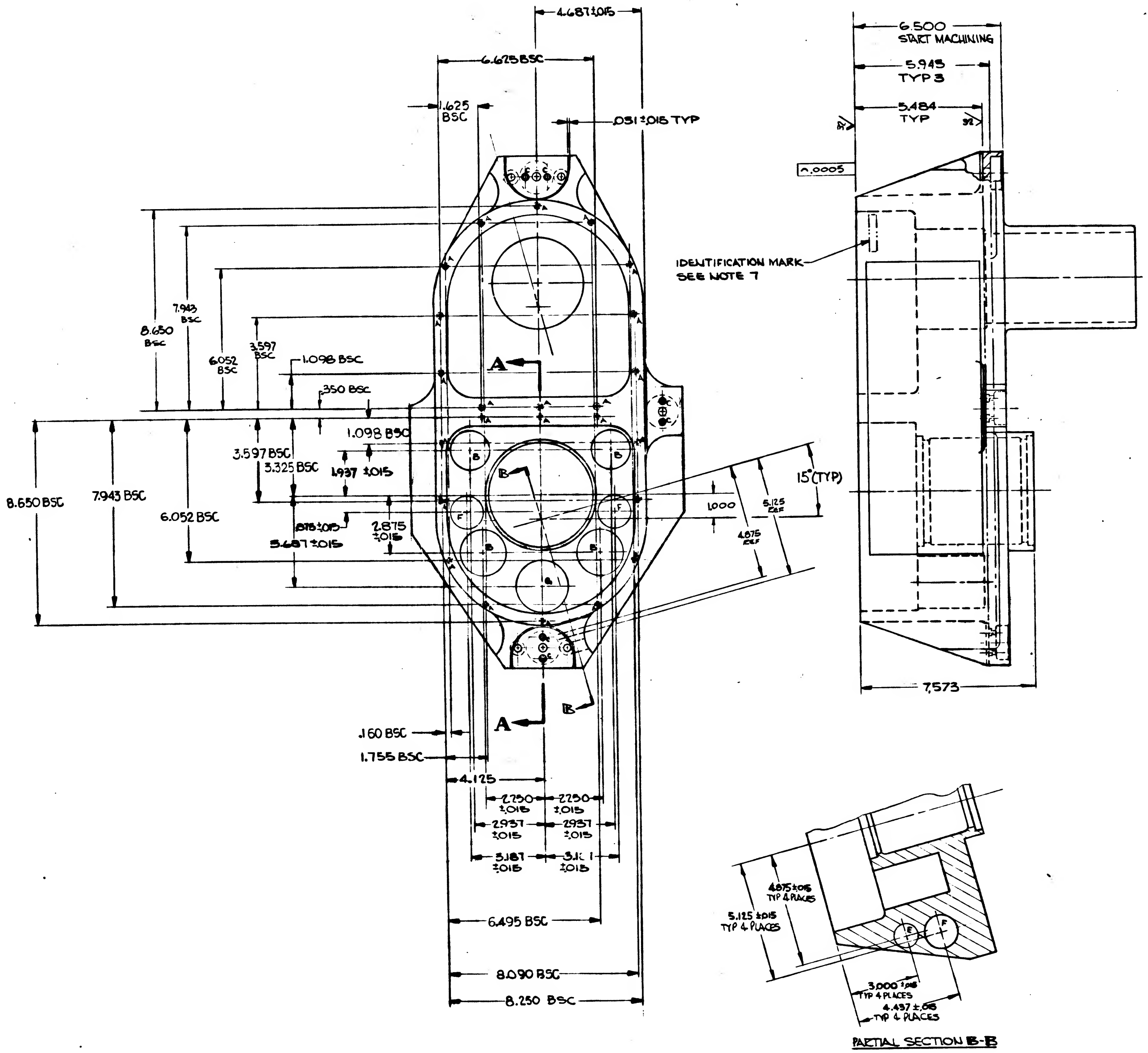
HOLE	DESCRIPTION	QTY
A	DR NO 19 (.166) X .375 DEEP 10-32 NF-2B X .250 DEEP REDRILL NO 4 (.209) X .031 DEEP	24
B	1.750±.015 DIA TO DEPTH SHOWN	4
C	DRILL NO. 30 (.1285) DIA THRU C'BORE .218 DIA x .125 DEEP	6
D	DRILL 5/16 (.312) DIA THRU	3
E	DRILL 9/32 (.281) DIA THRU C'BORE .593 DIA x .625 DEEP	4
F	1.250±.015 DIA TO DEPTH SHOWN	2
G	2.250±.015 DIA TO DEPTH SHOWN	1
E	1.000 DIA THRU	4
F	1.375 DIA THRU	4

REVISIONS 1962

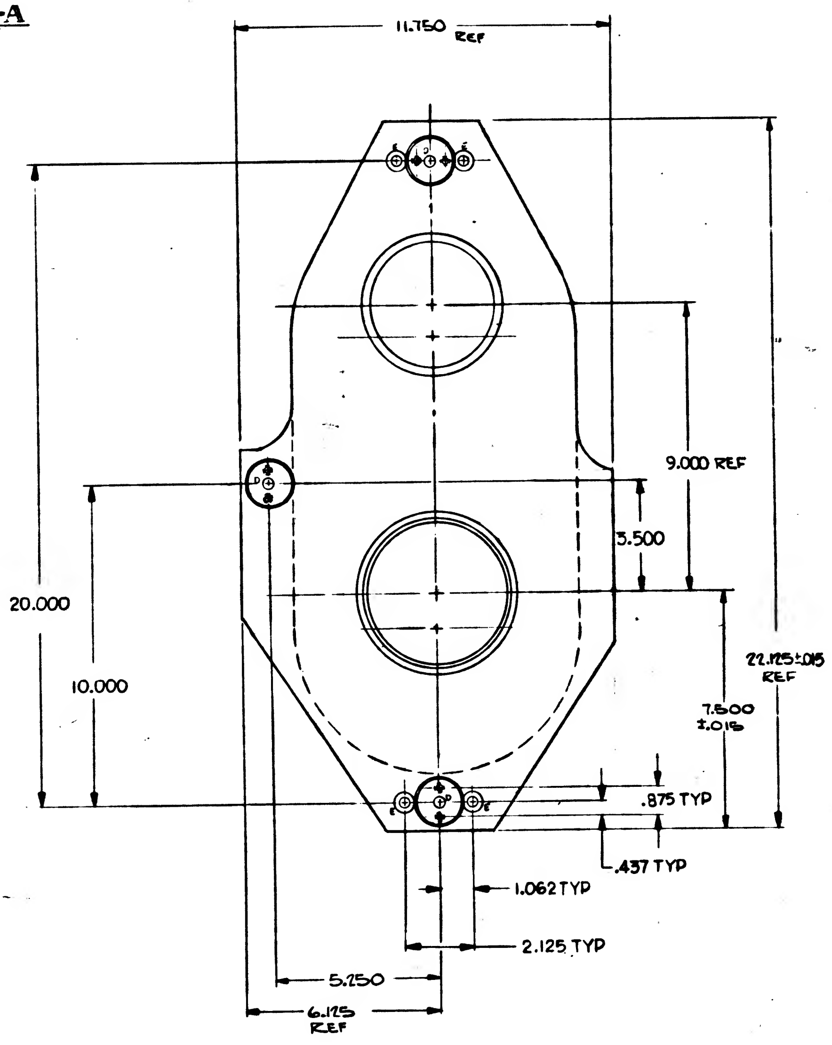
SYM	ZONE	DESCRIPTION	DATE	APPROVAL



SECTION A-A



PARTIAL SECTION B-B



MASTER

ITEM NO.	QTY REQD	SYM	GOVERNMENT/NASA NO.	KOLLSMAN PART NO.	CODE IDENT	NOMENCLATURE OR DESCRIPTION	MATERIAL	SPECIFICATION

LIST OF PARTS AND MATERIALS

NEXT ASSY	USED ON
1019969	1019969

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOL ON: FRACTIONS ± — DECIMALS ±.005 ANGLES ± 1°
DO NOT SCALE THIS DRAWING
MATERIAL: SEE NOTE 6
CONTRACT

KOLLSMAN INSTRUMENT CORPORATION
ELMHURST NEW YORK
KIC PN 03386910952
DRAWN A.S. Andolfi DATE 2-27-65
CHECKED B. Westerm 3-31-65
APPROVAL W. Legan 4-1-65
APPROVAL
NASA APPROVAL A.C. Mt 3-29-65
MIT APPROVAL

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

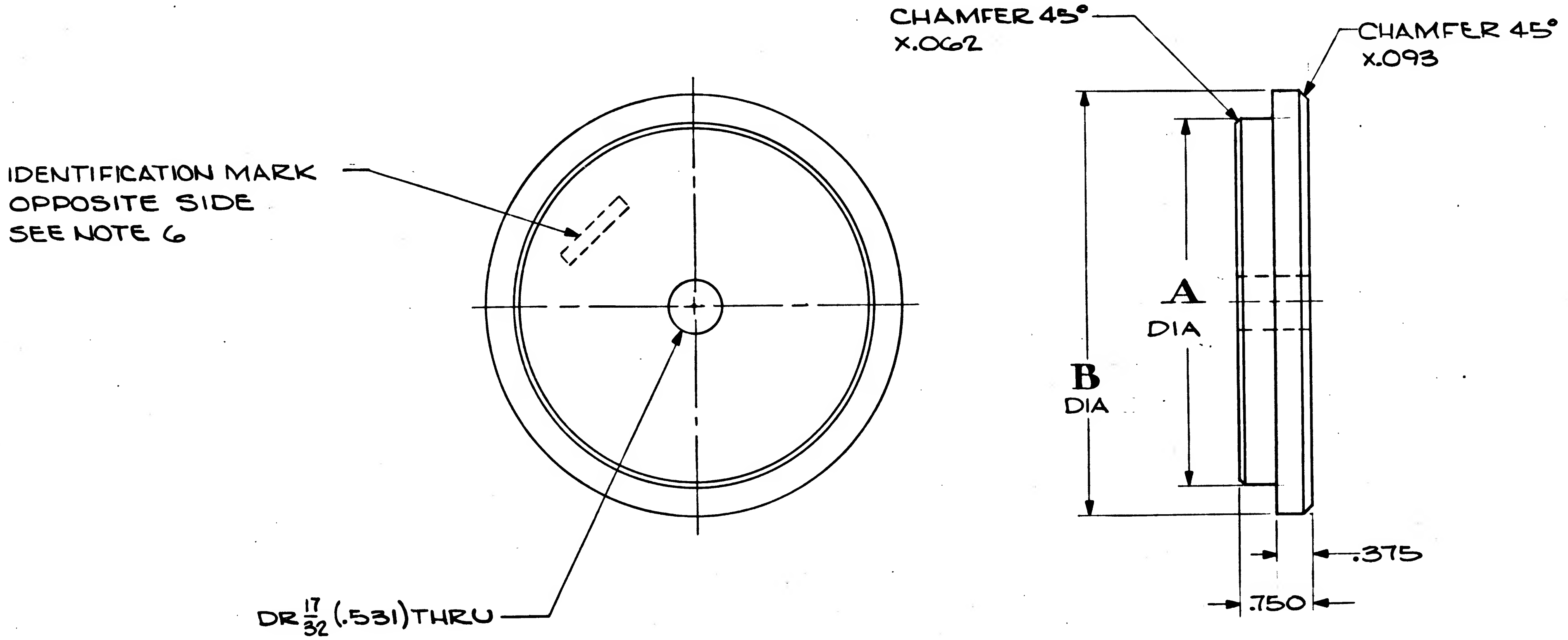
TITLE: BASE, HOUSING

CODE IDENT NO.
SIZE: E
NASA NUMBER: 1022137
SCALE 1/2
WEIGHT CALC ACTUAL
SHEET 1 OF 1

REVISIONS				19862
SYM	ZONE	DESCRIPTION	DATE	APPROVAL

NOTES:

1. INTERPRET DRAWING PER MIL-D-70327
2. GENERAL MACHINING STANDARDS PER ND1002078
3. FINISH 125√ UNLESS OTHERWISE SPECIFIED.
4. REMOVE BURRS IN ACCORDANCE WITH ND1002079
5. FINISH: ANODIZE PER MIL-A-8625 TYPE I
6. IDENTIFY USING NASA DRAWING NUMBER, REVISION LETTER AND MANUFACTURERS SYMBOL PER ND 1002019



NASA NO	A DIA	B DIA
1022142-1	3.625	4.375
1022142-2	4.312	4.750

MASTER

ITEM NO.	QTY REQD	SYM	GOVERNMENT/NASA NO.	KOLLSMAN PART NO.	CODE IDENT	NOMENCLATURE OR DESCRIPTION	MATERIAL	SPECIFICATION	UNIT WT

LIST OF PARTS AND MATERIALS

1019969	1019969
NEXT ASSY	USED ON

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES

TOL ON	FRACTIONS	DECIMALS	ANGLES
	± —	±.015	± 5°

DO NOT SCALE THIS DRAWING

MATERIAL
AL. ALY 2024-T4
FED SPEC QQ-A-225/6
TEMPER H34

CONTRACT

KOLLSMAN INSTRUMENT CORPORATION
ELMHURST NEW YORK
KIC PN 0338691 0141 THRU 0142

DRAWN K. SMITH DATE 3-26-65
CHECKED B. WERTENTEIL 3-31-65
APPROVAL [illegible] 4 1 65
APPROVAL
NASA APPROVAL [illegible] 6/4/65
MIT APPROVAL [illegible]

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

TITLE
PLATE, COVER

CODE IDENT NO.	SIZE	NASA NUMBER
89944	C	1022142

SCALE 1:1 WEIGHT CALC ACTUAL SHEET 1 OF 1

AD-1340

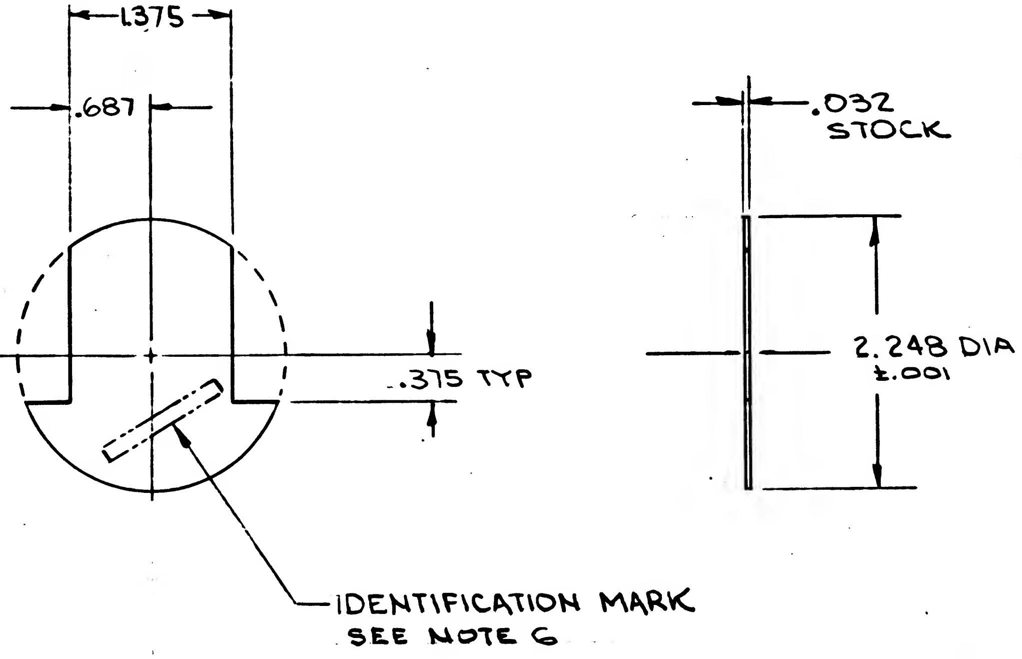
WA

REVISIONS TDRR 19860

SYM	ZONE	DESCRIPTION	DATE	APPROVAL

NOTES:

1. INTERPRET DRAWING PER MIL-D-70327
2. GENERAL MACHINING STANDARDS PER ND 1002078.
3. REMOVE BURRS PER ND1002079.
4. FINISH 125√ ALL OVER
5. APPLY ZINC CHROMATE PRIMER PER MIL-P-8585. APPLY LUSTERLESS ENAMEL PER TT-E-527 COLOR NO. 37038 OF FED-STD-595.
6. IDENTIFY USING NASA DRAWING NUMBER, REVISION LETTER AND MFR'S SYMBOL PER ND 1002019.



ITEM NO.	QTY REQD	SYM	GOVERNMENT/NASA NO.	KOLLSMAN PART NO.	CODE IDENT	NOMENCLATURE OR DESCRIPTION	MATERIAL	SPECIFICATION	UNIT WT

LIST OF PARTS AND MATERIALS

NEXT ASSY	USED ON
1019896	1019970

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOL ON: FRACTIONS ± / ; DECIMALS ±.005 ; ANGLES ± —
DO NOT SCALE THIS DRAWING
MATERIAL ALUMINUM ALLOY 2024-T3
FED SPEC QQ-A-250/4 TEMPER T3
CONTRACT

KOLLSMAN INSTRUMENT CORPORATION
ELMHURST NEW YORK
KIC PN 0338691016O
DRAWN DATE 4/2/65
CHECKED 4-5-65
APPROVAL 4-5-65
APPROVAL
NASA APPROVAL
MIT APPROVAL

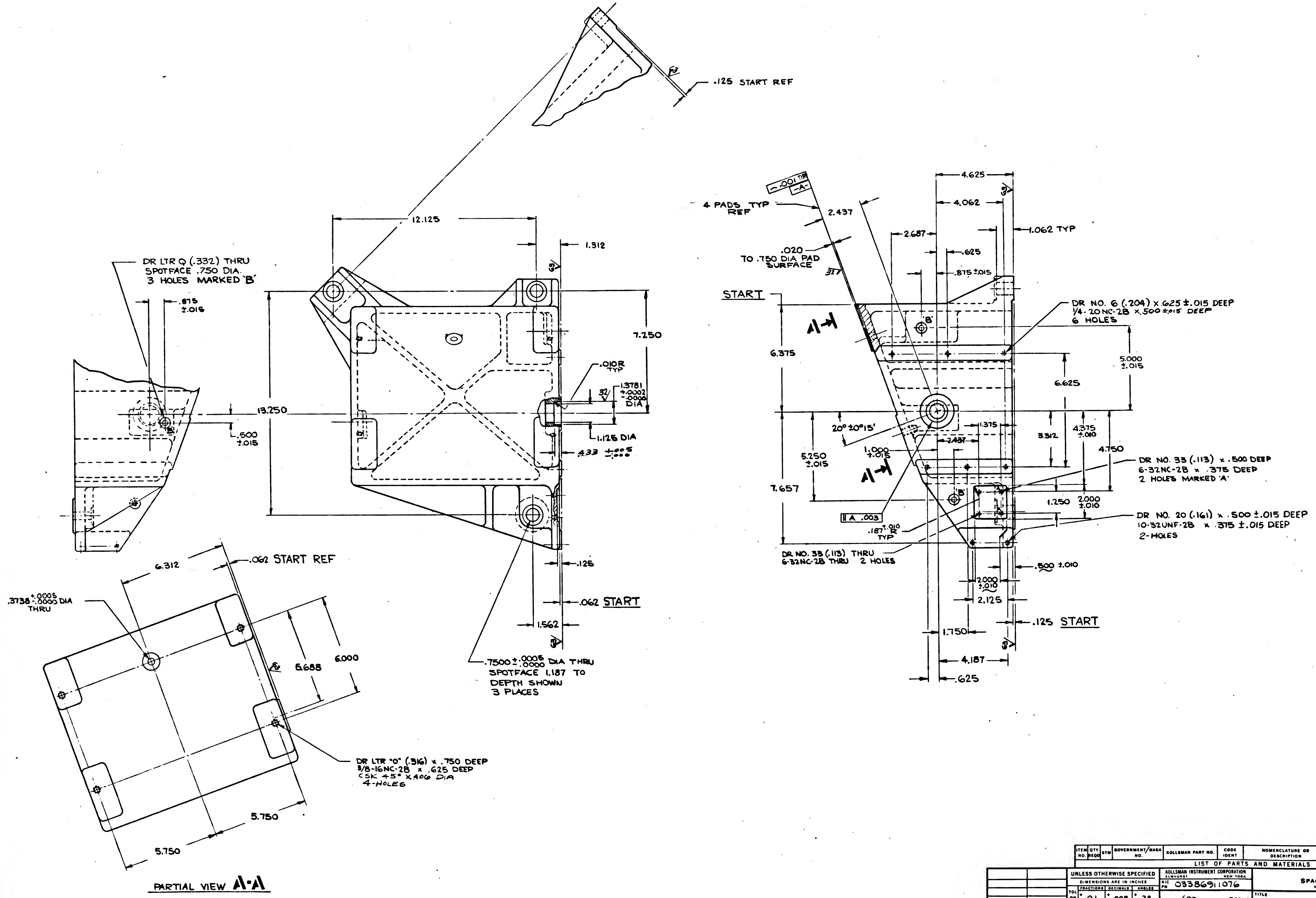
MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

TITLE STOP, LIGHT

CODE IDENT NO. 89944
SIZE C
NASA NUMBER 1022147
SCALE 1:1
WEIGHT CALC ACTUAL
SHEET 1 OF 1

MASTER

NOTES:
1. INTERPRET DWG PER MIL-D-70327.
2. GENERAL MACHINING STANDARDS PER ND1002078.
3. REMOVE BURRS PER ND1002079
4. STRESS RELIEVE BEFORE FINAL MACHINING.
5. FINISH $\overset{125}{\vee}$ UNLESS OTHERWISE SPECIFIED.
6. FINISH: CHEMICAL FILM PER MIL-C-5541
7. PREPARE UNMACHINED SURFACES PER ND1002098.
APPLY TWO (2) COATS OF GRAY ENAMEL PER ND1002098,
PARA 3.1.3.



REVISIONS

SYM	ZONE	DESCRIPTION	DATE	APPROVAL

ITEM NO.	QTY REQD	SYM	GOVERNMENT/NASA NO.	KOLLSMAN PART NO.	CODE IDENT	NOMENCLATURE OR DESCRIPTION	MATERIAL	SPECIFICATION	UNIT WT

LIST OF PARTS AND MATERIALS

NEXT ASSY	USED ON
1019952	1019962

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES

TOL ON	FRACTIONS	DECIMALS	ANGLES
	± ~	± .005	± 2°

DO NOT SCALE THIS DRAWING
MATERIAL 1022153
CONTRACT

KOLLSMAN INSTRUMENT CORPORATION
ELMHURST NEW YORK
KIC PN 0338691076
DRAWN J.P. Demas DATE 3-29-65
CHECKED 4-6-65
APPROVAL
APPROVAL
NASA APPROVAL
MIT APPROVAL

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

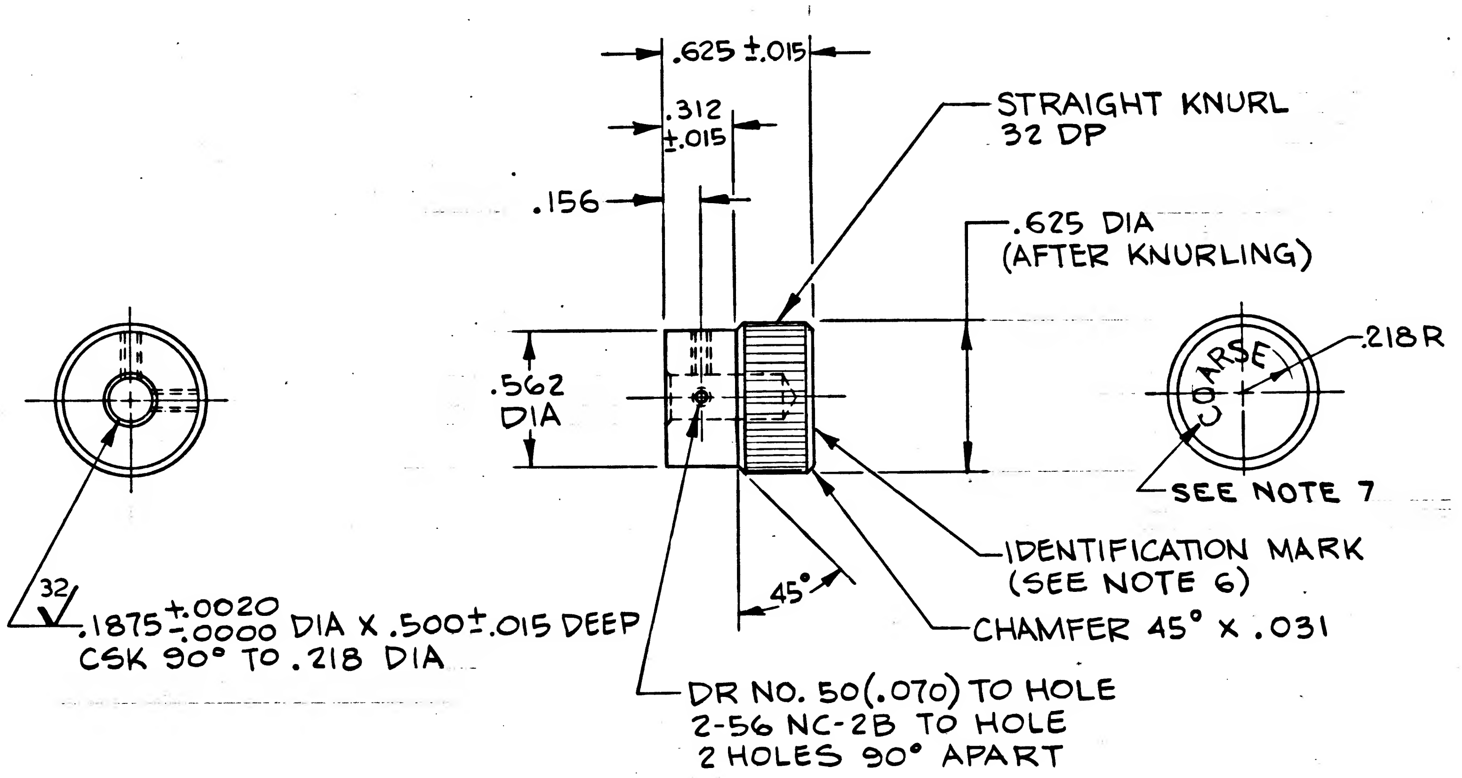
TITLE
SUPPORT, SINE TABLE
(MACHINING)

CODE IDENT NO. 89944
SIZE E
NASA NUMBER 1022152
SCALE 1/2
WEIGHT
CALC
ACTUAL
SHEET 1 OF 1

REVISIONS 217 29				
SYM	ZONE	DESCRIPTION	DATE	APPROVAL

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH MIL-D-70327
2. GENERAL MACHINING STANDARDS IN ACCORDANCE WITH ND1002078.
3. REMOVE BURRS PER ND1002079.
4. FINISH $\overset{125}{\surd}$ UNLESS OTHERWISE SPECIFIED.
5. ANODIZE (BLACK) PER MIL-A-8625, TYPE II
6. IDENTIFY USING NASA DRAWING NO., REV LETTER AND MANUFACTURER'S SYMBOL PER ND1002019
7. ENGRAVE THE WORD "COARSE" AS SHOWN .093 HIGH x .016 WIDE LINE x .016 DEEP (FOR 1022192-002 ONLY)


.625 ±.015
.312 ±.015
.156
STRAIGHT KNURL 32 DP
.625 DIA (AFTER KNURLING)
.218 R
COARSE
SEE NOTE 7
.562 DIA
IDENTIFICATION MARK (SEE NOTE 6)
45°
CHAMFER 45° x .031
32
.1875 +.0020 -.0000 DIA x .500 ±.015 DEEP CSK 90° TO .218 DIA
DR NO. 50 (.070) TO HOLE 2-56 NC-2B TO HOLE 2 HOLES 90° APART

NASA PART NO.	ENGRAVING
1022192-001	NONE
1022192-002	"COARSE"

MASTER

ITEM NO.	QTY REQD	SYM	GOVERNMENT/NASA NO.	KOLLSMAN PART NO.	CODE IDENT	NOMENCLATURE OR DESCRIPTION	MATERIAL	SPECIFICATION	UNIT WT

LIST OF PARTS AND MATERIALS

NEXT ASSY	USED ON
1019900	1019977

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOL ON: FRACTIONS ± —; DECIMALS ±.005; ANGLES ± 1°
DO NOT SCALE THIS DRAWING
MATERIAL AL ALY 2024-T4
FED. SPEC-QQ-A-225/6 TEMPER T4
CONTRACT NAS 9-497

KOLLSMAN INSTRUMENT CORPORATION
ELMHURST NEW YORK
KIC PN 03386910981-½
DRAWN AJ PERALTA DATE 3-12-65
CHECKED 3-17-65
APPROVAL 3-17-65
APPROVAL
NASA APPROVAL
MIT APPROVAL

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

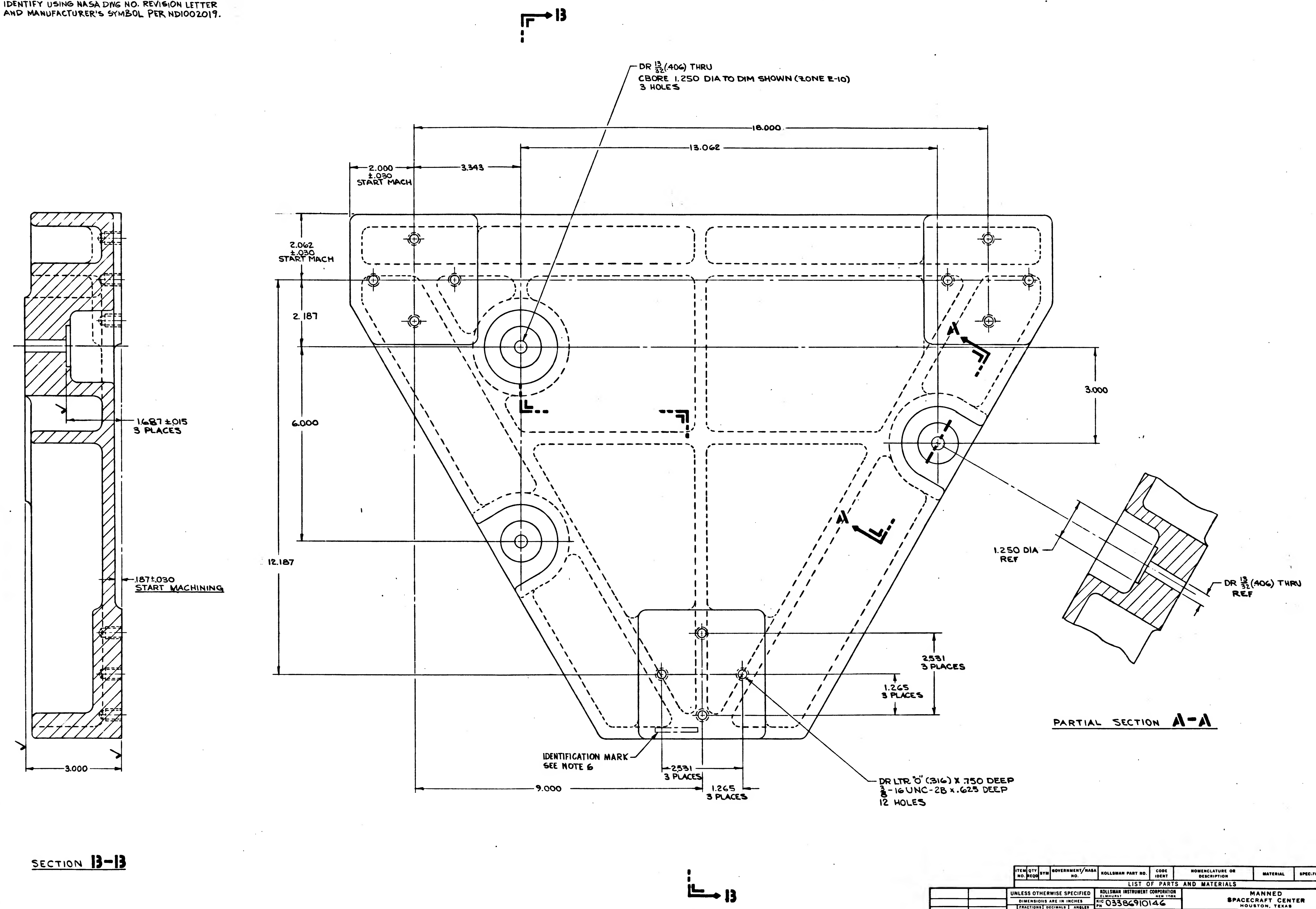
TITLE KNOB

CODE IDENT NO. 89944
SIZE C
NASA NUMBER 1022192
SCALE 2/1
WEIGHT CALC ACTUAL
SHEET 1 OF 1

AD-1340

REVISIONS				
SYM	ZONE	DESCRIPTION	DATE	APPROVAL
—	—	CLASS A RELEASE PER TDRR 21714		

NOTES:
1. INTERPRET DWG PER MIL-D-70327.
2. GENERAL MACHINING STANDARDS PER ND1002078
3. REMOVE BURRS PER ND1002079.
4. FINISH $\sqrt{}^{125}$ UNLESS OTHERWISE SPECIFIED.
5. FINISH: ANODIZE PER MIL-A-8625 TYPE II. HOT WATER SEAL APPLY TWO (2) COATS OF GRAY ENAMEL PER ND1002098 PARA 3.1.3., TO ALL UNMACHINED SURFACES.
6. IDENTIFY USING NASA DWG NO. REVISION LETTER AND MANUFACTURER'S SYMBOL PER ND1002019.



SECTION B-B

PARTIAL SECTION A-A

ITEM NO.	QTY REQD	SYM	GOVERNMENT/NASA NO.	KOLLSMAN PART NO.	CODE IDENT	NOMENCLATURE OR DESCRIPTION	MATERIAL	SPECIFICATION	UNIT WT

LIST OF PARTS AND MATERIALS

NEXT ASSY	USED ON
1019926	1019926

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOL ON: FRACTIONS ± —; DECIMALS ± .005; ANGLES ± —
DO NOT SCALE THIS DRAWING
MATERIAL 1022205
CONTRACT NAS 9-497

KOLLSMAN INSTRUMENT CORPORATION
ELMHURST NEW YORK
KIC PN 03386910146
DRAWN M. SCHORR DATE 4-1-65
CHECKED S. S[illegible] 4-6-65
APPROVAL W. [illegible] 4-7-6[illegible]
APPROVAL
NASA APPROVAL
MIT APPROVAL

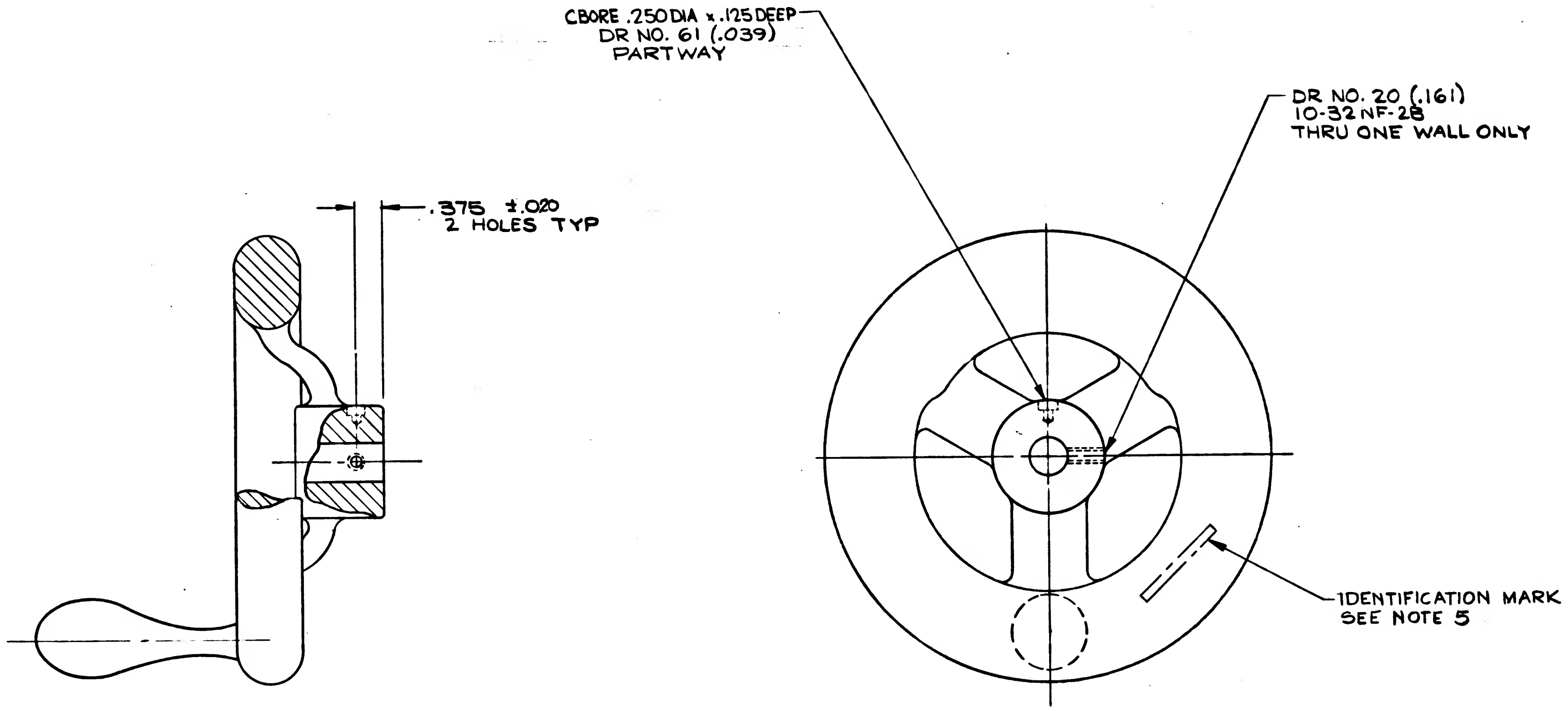
MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

TITLE
PLATE, ADAPTER
(MACHINING)

CODE IDENT NO. 89944
SIZE E
NASA NUMBER 1022206
SCALE 1/1
WEIGHT CALC ACTUAL
SHEET OF

REVISIONS 20458 6/28/65				
SYM	ZONE	DESCRIPTION	DATE	APPROVAL

NOTES:
1. INTERPRET DWG PER MIL-D-70327.
2. GENERAL MACHINING STANDARDS PER ND1002078.
3. REMOVE BURRS PER ND1002079.
4. FINISH 125/ UNLESS OTHERWISE SPECIFIED.
5. IDENTIFY USING NASA DRAWING NO., REVISION LETTER AND MANUFACTURER'S SYMBOL PER ND1002019.



ITEM NO.	QTY REQD	SYM	GOVERNMENT/NASA NO.	KOLLSMAN PART NO.	CODE IDENT	NOMENCLATURE OR DESCRIPTION	MATERIAL	SPECIFICATION	UNIT WT

LIST OF PARTS AND MATERIALS

NEXT ASSY	USED ON
1022824	1019962

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES

TOL ON	FRACTIONS	DECIMALS	ANGLES
	± ~	± ~	± ~

DO NOT SCALE THIS DRAWING
MATERIAL REID TOOL SUPPLY PART NO WSD6
CONTRACT

KOLLSMAN INSTRUMENT CORPORATION
ELMHURST NEW YORK
KIC PN 03386910221
DRAWN J.P. Demas DATE 4-15-65
CHECKED B. Kyland 4-20-65
APPROVAL 4-20-65
APPROVAL
NASA APPROVAL
MIT APPROVAL

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

TITLE
CRANK, WHEEL
(REWORK)

CODE IDENT NO.	SIZE	NASA NUMBER
89944	D	1022211

SCALE 1:1 WEIGHT CALC ACTUAL SHEET 1 OF 1

1022211

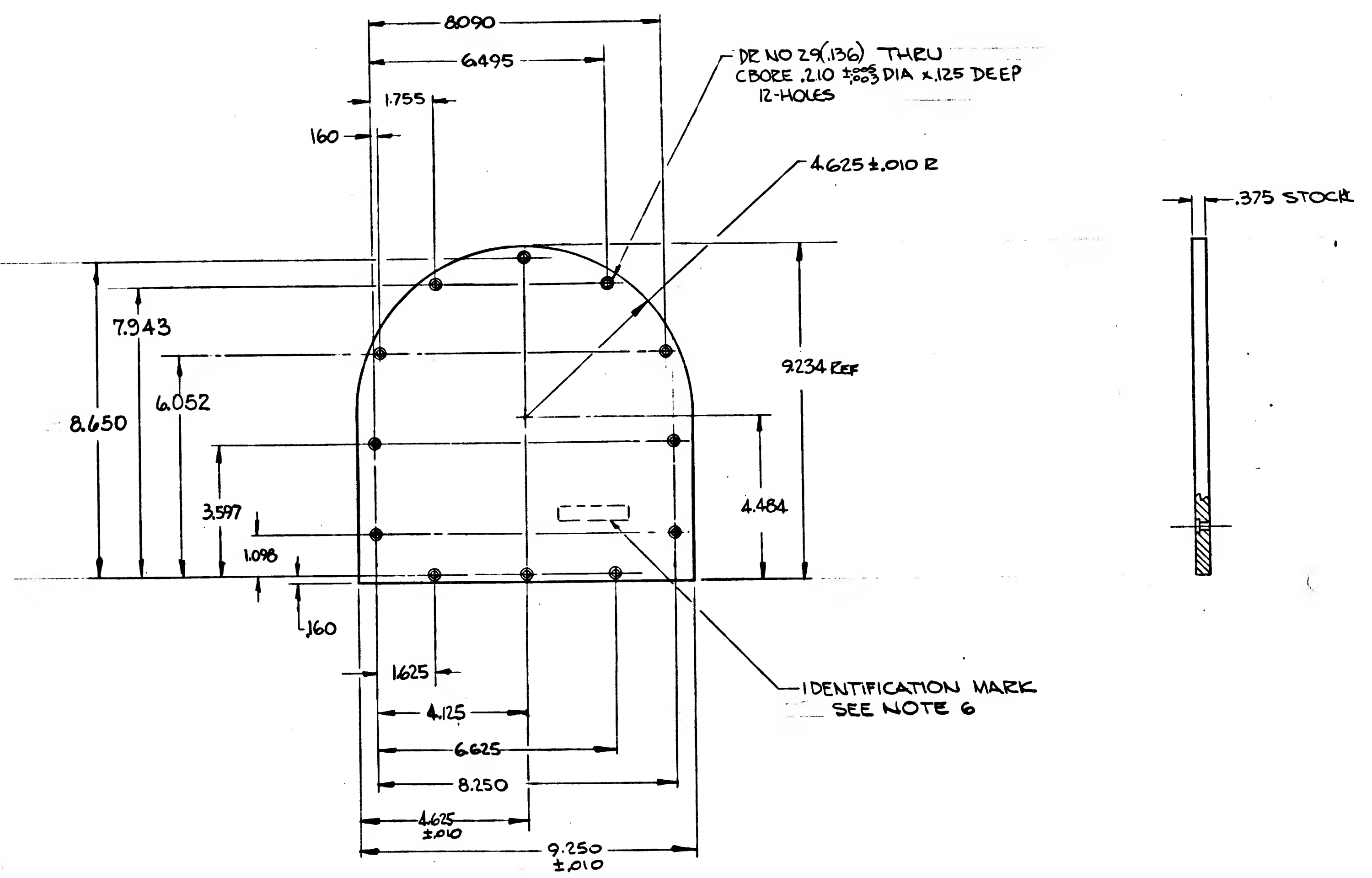
MASTER

AD-1380

REVISIONS				
SYM	ZONE	DESCRIPTION	DATE	APPROVAL

NOTES:

INTERPRET DRAWING PER MIL-D-70327.
2. GENERAL MACHINING STANDARDS PER ND1002078.
3. FINISH 125√ UNLESS OTHERWISE SPECIFIED.
4. REMOVE BURRS PER ND1002079.
5. ANODIZE PER MIL-A-8625 TYPE II BLACK.
6. IDENTIFY USING NASA DRAWING NUMBER REVISION LETTER AND MANUFACTURERS SYMBOL PER ND1002019.



MASTER

ITEM NO.	QTY REQD	SYM	GOVERNMENT/NASA NO.	KOLLSMAN PART NO.	CODE IDENT	NOMENCLATURE OR DESCRIPTION	MATERIAL	SPECIFICATION

LIST OF PARTS AND MATERIALS

NEXT ASSY	USED ON
1019969	1019969

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOL ON: FRACTIONS ± ~ ; DECIMALS ± .005 ; ANGLES ± ~
DO NOT SCALE THIS DRAWING
MATERIAL ALUMINUM ALLOY 2024-T4
FED SPEC QQ-A-225/6 TEMPER T4
CONTRACT

KOLLSMAN INSTRUMENT CORPORATION
ELMHURST NEW YORK
KIC PN 03386910223
DRAWN B. WESTENTHAL DATE 4-9-65
CHECKED H. BRILL 4-12-65
APPROVAL
APPROVAL
NASA APPROVAL
MIT APPROVAL

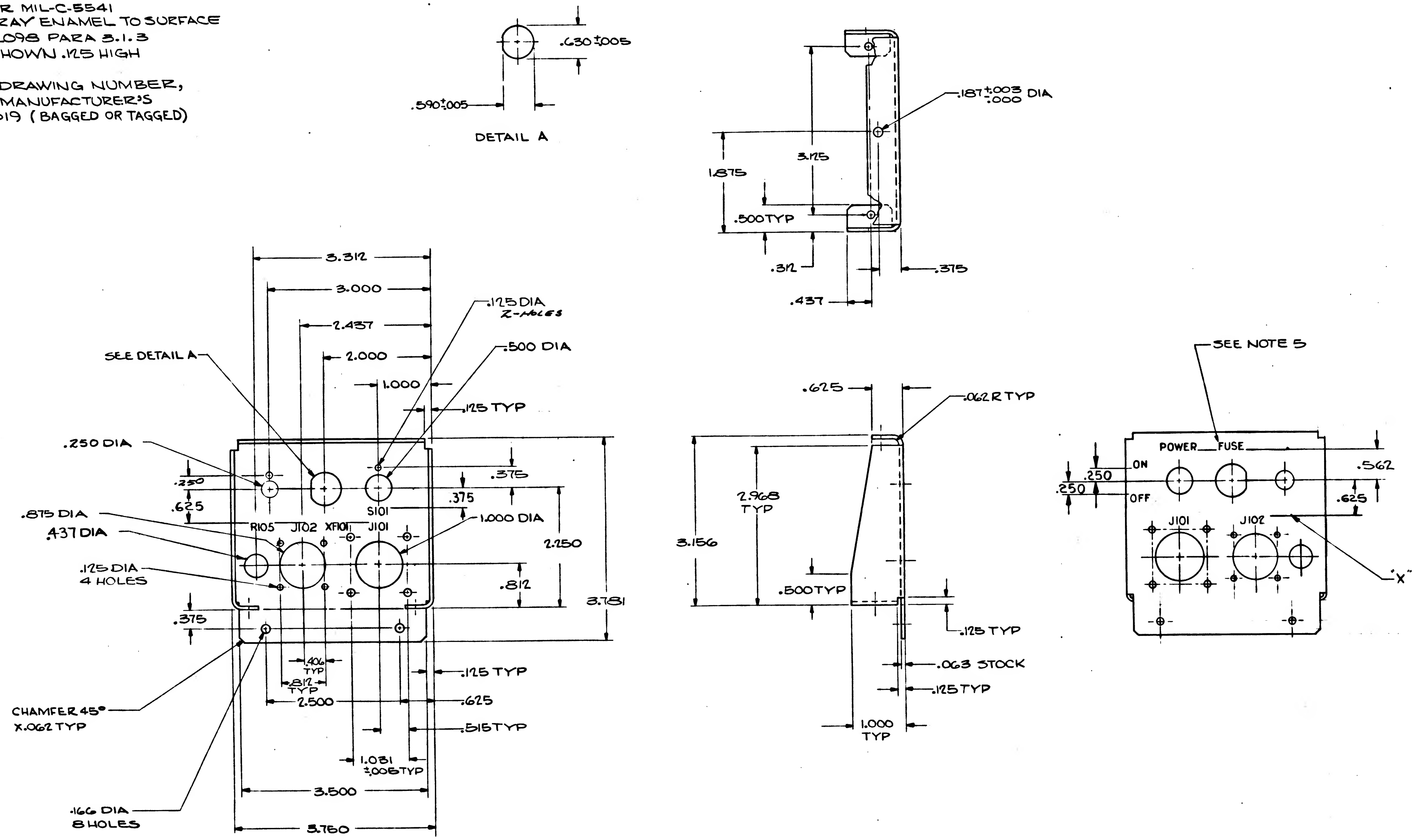
MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

TITLE
COVER

CODE IDENT NO. 89944
SIZE D
NASA NUMBER 1022223
SCALE 1:2
WEIGHT CALC ACTUAL
SHEET 1 OF

SYM	ZONE	REVISIONS TDRR 19860 DESCRIPTION	DATE	APPROVAL

NOTES:
1. INTERPRET DWG PER MIL-D-70327
2. GENERAL MACHINING STANDARDS PER ND1002078
3. REMOVE BURRS PER ND1002079
4. FINISH: CHEMICAL FILM PER MIL-C-5541
5. APPLY TWO (2) COATS OF GRAY ENAMEL TO SURFACE MARKED "X" PER ND1002098 PARA 3.1.3
6. MARK CHARACTERS AS SHOWN .125 HIGH PER ND1002019
7. IDENTIFY USING NASA DRAWING NUMBER, REVISION LETTER AND MANUFACTURER'S SYMBOL PER ND1002019 (BAGGED OR TAGGED)



MASTER

ITEM NO.	QTY REQD	SYM	GOVERNMENT/NASA NO.	KOLLSMAN PART NO.	CODE IDENT	NOMENCLATURE OR DESCRIPTION	MATERIAL	SPECIFICATION	UNIT WT

LIST OF PARTS AND MATERIALS

NEXT ASSY	USED ON
1022840	019970

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOL ON: FRACTIONS ± — ; DECIMALS ±.010 ; ANGLES ± 2°
DO NOT SCALE THIS DRAWING
MATERIAL AL. ALY 5052-H34
FED SPEC QQ-A-250/8 TEMPER H34
CONTRACT

KOLLSMAN INSTRUMENT CORPORATION
ELMHURST NEW YORK
KIC PN 03386911089
DRAWN K. SMITH DATE 4-21
CHECKED B. Kaplanski 4-23-65
APPROVAL
APPROVAL
NASA APPROVAL A. C. 3 Jun 65
MIT APPROVAL G. Mc 5/3/65

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

TITLE BRACKET

CODE IDENT NO. 89944
SIZE D
NASA NUMBER 1022253
SCALE 1:1
WEIGHT CALC ACTUAL
SHEET 1 OF 1

WA

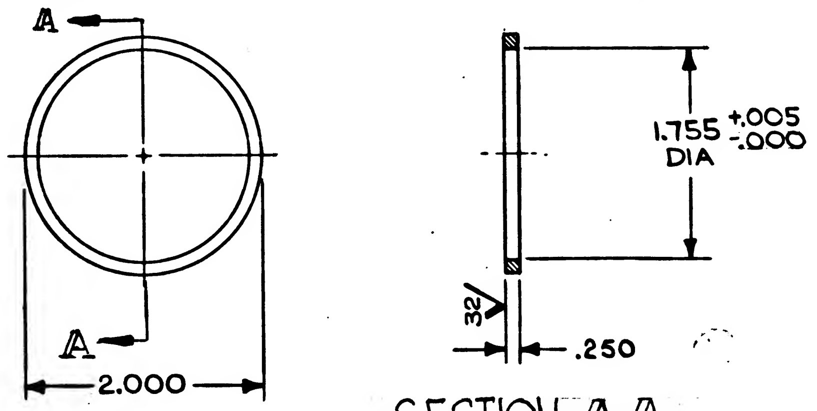
1022253

AD-1280

REVISIONS	19862		
SYM	DESCRIPTION	DATE	APPROVAL

NOTES:

1. INTERPRET DWG IN ACCORD. WITH MIL-D-70327.
2. GENERAL MACHINING STANDARDS IN ACCORD. WITH ND1002078.
3. UNLESS OTHERWISE SPECIFIED:
   - a. 63/ FINISH ALL OVER.
   - b. √ BREAK SHARP CORNERS IN ACCORD. WITH ND1002078.
4. REMOVE BURRS IN ACCORD. WITH ND1002079.
5. FINISH: PASSIVATE IN ACCORD. WITH MIL-STD-171, FINSH NO. 5.4.1.
6. IDENTIFY USING NASA DRAWING NO. REVISION LETTER AND MANUFACTURERS SYMBOL PER ND1002019 BAGGED OR TAGGED.
7. REF. THIS PART IS SIMILAR TO NASA PART NO. 1011304.



SECTION A-A

ITEM NO.	QTY REQD	SYM	GOVERNMENT/NASA NO.	KOLLSMAN PART NO.	CODE IDENT	NOMENCLATURE OR DESCRIPTION	MATERIAL	SPECIFICATION	UNIT WT

LIST OF PARTS AND MATERIALS

MASTER

1019969	1019969
NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES

TOL ON	FRACTIONS	DECIMALS	ANGLES
	±	± .005	± ½

DO NOT SCALE THIS DRAWING

MATERIAL CORROSION RESISTANT STEEL FED.SPEC QQ-S-763 CLASS 440C, COND. A

CONTRACT

KOLLSMAN INSTRUMENT CORPORATION
ELMHURST NEW YORK

KIC PN 03386911095

DRAWN B. WERTENTER DATE 4-19-65
CHECKED H. BRILL 4/28/65
APPROVAL 4/30/65
APPROVAL
NASA APPROVAL 6/4/65
6/4/65
MIT APPROVAL

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

TITLE
SPACER

CODE IDENT NO.	SIZE	NASA NUMBER
89944	B	1022270

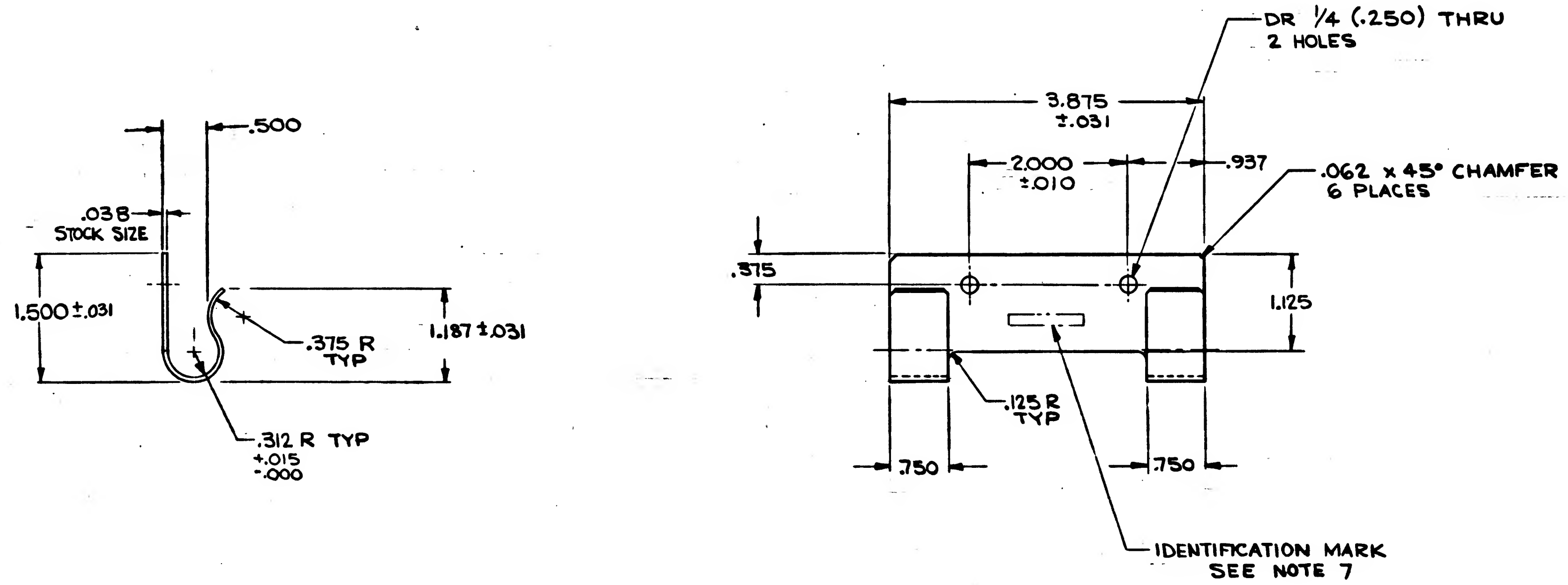
SCALE 1/1 WEIGHT CALC ACTUAL SHEET 1 OF 1

WA

K+E E-153

REVISIONS				
SYM	ZONE	DESCRIPTION	DATE	APPROVAL
—	—	CLASS A RELEASE PER TDRR 21714		

NOTES:
1. INTERPRET DWG PER MIL-D-70327.
2. GENERAL MACHINING STANDARDS PER ND1002078.
3. REMOVE BURRS PER ND1002079.
4. FINISH 250√ UNLESS OTHERWISE SPECIFIED.
5. HARDEN TO ROCKWELL C35-42 PER ND1002114.
6. CADMIUM PLATE PER QQ-P-416 TYPE II CLASS 1.
7. IDENTIFY USING NASA DRAWING NO., REVISION LETTER AND MANUFACTURER'S SYMBOL PER ND1002019.



ITEM NO.	QTY REQD	SYM	GOVERNMENT/NASA NO.	KOLLSMAN PART NO.	CODE IDENT	NOMENCLATURE OR DESCRIPTION	MATERIAL	SPECIFICATION	UNIT WT

LIST OF PARTS AND MATERIALS

NEXT ASSY	USED ON
1019926	1019926

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOL ON: FRACTIONS ± ~ DECIMALS ±.015 ANGLES ± 2°
DO NOT SCALE THIS DRAWING
MATERIAL BERYLLIUM COPPER B194, ANNEALED
FED. SPEC: QQ-C-533 COND A
CONTRACT NAS9-497

KOLLSMAN INSTRUMENT CORPORATION
ELMHURST NEW YORK
KIC PN 03386911222
DRAWN J.P. Demas DATE 5-5-65
CHECKED S. Saw 5-12-65
APPROVAL [illegible] 5-17-65
APPROVAL
NASA APPROVAL R. C. Metzger [illegible] 6/11/65
MIT APPROVAL [illegible] 18 Jun 65

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

TITLE
CLIP, WRENCH

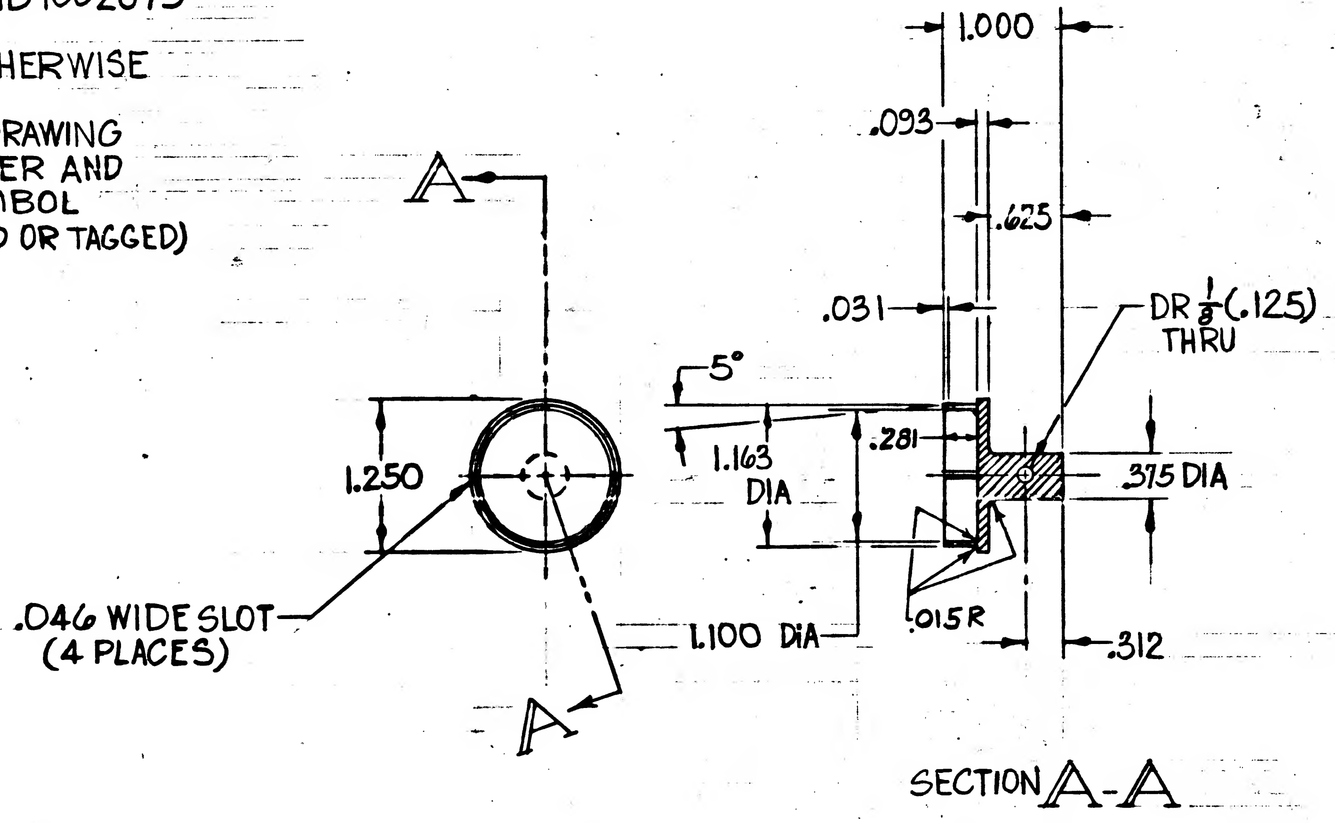
CODE IDENT NO. 89944
SIZE D
NASA NUMBER 1022308
SCALE 1:1
WEIGHT CALC ACTUAL
SHEET 1 OF 1

MASTER

AD-1380

REVISIONS 23053				
SYM	ZONE	DESCRIPTION	DATE	APPROVAL
REV	—	CLASS A RELEASE PER TDRR		

NOTES:
1. INTERPRET DWG PER MIL-D-70327
2. GENERAL MACHINING STANDARDS PER ND 1002078
3. REMOVE BURRS PER ND 1002079
4. FINISH 125✓ UNLESS OTHERWISE SPECIFIED.
5. IDENTIFY USING NASA DRAWING NUMBER, REVISION LETTER AND MANUFACTURER'S SYMBOL PER ND 1002019 (BAGGED OR TAGGED)



SECTION A-A

ITEM NO.	QTY REQD	SYM	GOVERNMENT/NASA NO.	KOLLSMAN PART NO.	CODE IDENT	NOMENCLATURE OR DESCRIPTION	MATERIAL	SPECIFICATION	UNIT WT

LIST OF PARTS AND MATERIALS

MASTER

1022880	1022880
NEXT ASSY	USED ON

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES

TOL ON	FRACTIONS	DECIMALS	ANGLES
	± ~	±.005	± ~

DO NOT SCALE THIS DRAWING
MATERIAL POLYTETRAFLUOROETHYLENE (TFE-FLUROCARBON)
SPEC. MIL-P-19468 A
CONTRACT NAS9-497

KOLLSMAN INSTRUMENT CORPORATION
ELMHURST NEW YORK
KIC PN 03386911326
DRAWN E.J. ROHL DATE 5-11-65
CHECKED L.K. Russell 6-14-65
APPROVAL 7-23-65
APPROVAL
NOT REQUIRED PER LETTER NASA APPROVED 612 7/27
MIT APPROVAL

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS
TITLE COVER, LENS (SXT & SCT EYEPIECE)

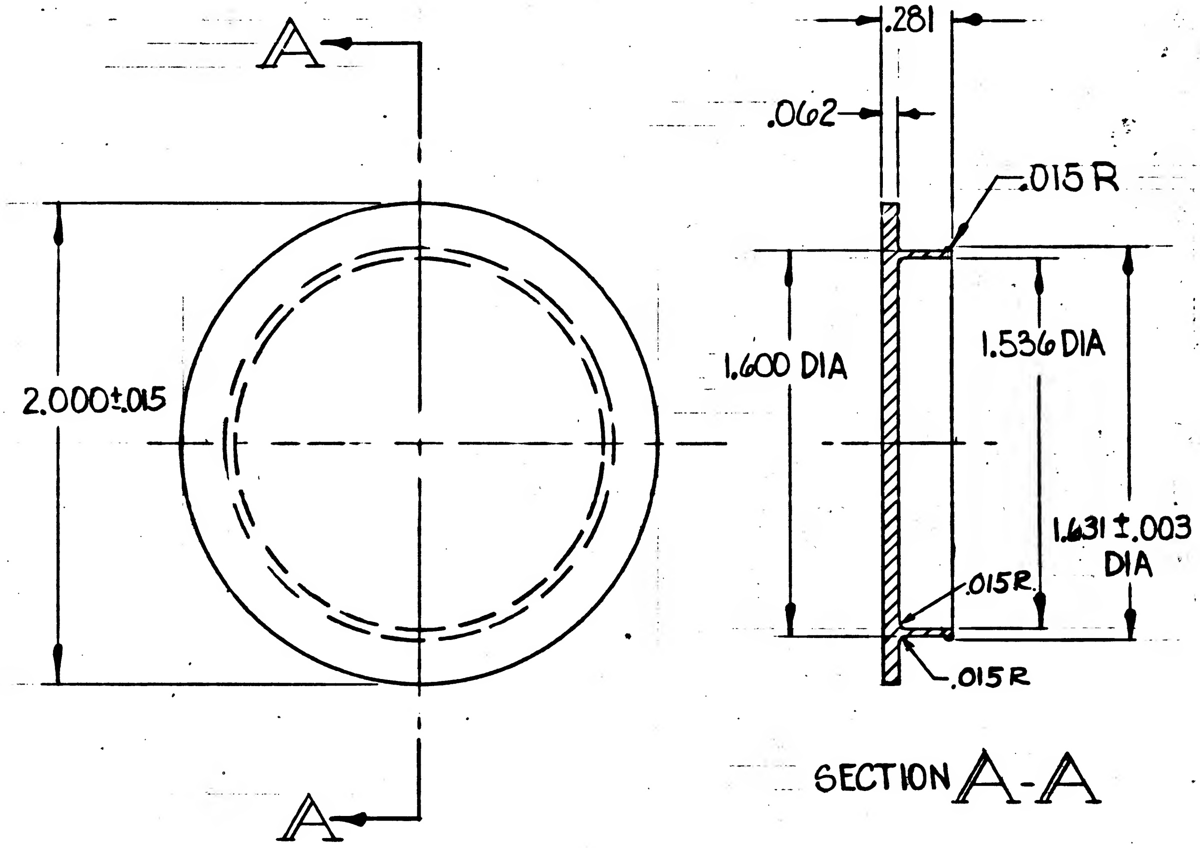
CODE IDENT NO.	SIZE	NASA NUMBER
89944	C	1022332

SCALE 1/1 WEIGHT CALC ACTUAL SHEET 1 OF 1

AD-1340

REVISIONS		23053		
SYM	ZONE	DESCRIPTION	DATE	APPROVAL
REV	—	CLASS "A" RELEASE PER TORR		

NOTES:
1. INTERPRET DWG PER MIL-D-70327
2. GENERAL MACHINING STANDARDS PER ND1002078
3. REMOVE BURRS PER ND1002079
4. FINISH 125√ UNLESS OTHERWISE SPECIFIED.
5. IDENTIFY USING NASA DRAWING NUMBER, REVISION LETTER AND MANUFACTURER'S SYMBOL PER ND1002019. (BAGGED OR TAGGED)



ITEM NO.	QTY REQD	SYM	GOVERNMENT/NASA NO.	KOLLSMAN PART NO.	CODE IDENT	NOMENCLATURE OR DESCRIPTION	MATERIAL	SPECIFICATION	UNIT WT

LIST OF PARTS AND MATERIALS

NEXT ASSY	USED ON
1022880	1022880

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES

TOL ON	FRACTIONS	DECIMALS	ANGLES
	± ∼	±.005	± ∼

DO NOT SCALE THIS DRAWING
MATERIAL POLYTETRAFLUOROETHYLENE (TFE-FLUOROCARBON) SPEC. MIL-P-19468 A
CONTRACT NAS9-497

KOLLSMAN INSTRUMENT CORPORATION
ELMHURST NEW YORK
KIC PN 03386911328
DRAWN E.J. ROHL DATE 5-7-65
CHECKED L.K. Prescott 6-19-65
APPROVAL 7-23-65
APPROVAL ~~NOT REQUIRED PER LETTER~~
NASA PP7-65-612
NASA APPROVAL 7/27/65
MIT APPROVAL W. Kupfer 6/25/65

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

TITLE COVER, LENS
(LONG EYE RELIEF SCT)

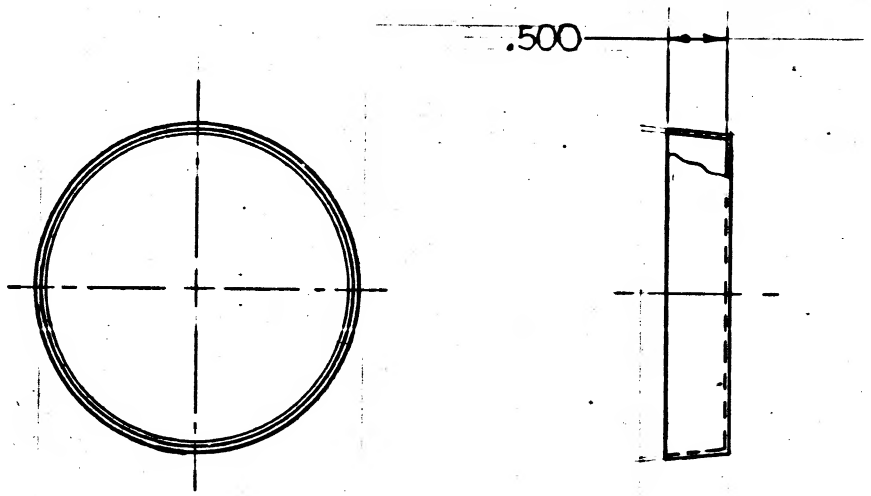
CODE IDENT NO.	SIZE	NASA NUMBER
89944	C	1022334

SCALE 2/1 WEIGHT CALC ACTUAL SHEET 1 OF 1

MASTER

REVISIONS 23053				
SYM	ZONE	DESCRIPTION	DATE	APPROVAL
REV	—	CLASS "A" RELEASE PER TORR		

NOTES:
1. INTERPRET DWG PER MIL-D-70327
2. GENERAL MACHINING STANDARDS PER ND 1002078
3. REMOVE BURRS PER ND 1002079
4. FINISH 125√ UNLESS OTHERWISE SPECIFED
5. FOR MATERIAL USE: P/N 1001773-003 ✱
6. IDENTIFY USING DRAWING NUMBER, REVISION LETTER AND MANUFACTURER'S SYMBOL PER ND 1002019. (BAGGED OR TAGGED)



✱ VENDOR ITEM: SEE SOURCE CONTROL OR SPECIFICATION CONTROL DRAWING.

MASTER

ITEM NO.	QTY REQD	SYM	GOVERNMENT/NASA NO.	KOLLSMAN PART NO.	CODE IDENT	NOMENCLATURE OR DESCRIPTION	MATERIAL	SPECIFICATION	UNIT WT

LIST OF PARTS AND MATERIALS

NEXT ASSY	USED ON
1022880	1022880

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES

TOL ON	FRACTIONS	DECIMALS	ANGLES
	± ~	±.031	± ~

DO NOT SCALE THIS DRAWING

MATERIAL SEE NOTE 5

CONTRACT NAS9-497

KOLLSMAN INSTRUMENT CORPORATION
ELMHURST NEW YORK
KIC PN 03386911329

DRAWN E. J. ROHL DATE 5-7-65
CHECKED L. K. Prescott 6-14-65
APPROVAL [illegible] 7-13-65
APPROVAL
NOT REQUIRED PER LETTER NASA PP7-65-612
NASA APPROVAL [illegible] 7/22/65
MIT APPROVAL W. Kupfer 6-20-65

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

TITLE COVER, LENS (LONG EYE RELIEF SCT) ALTERED COMMERICAL STANDARD)

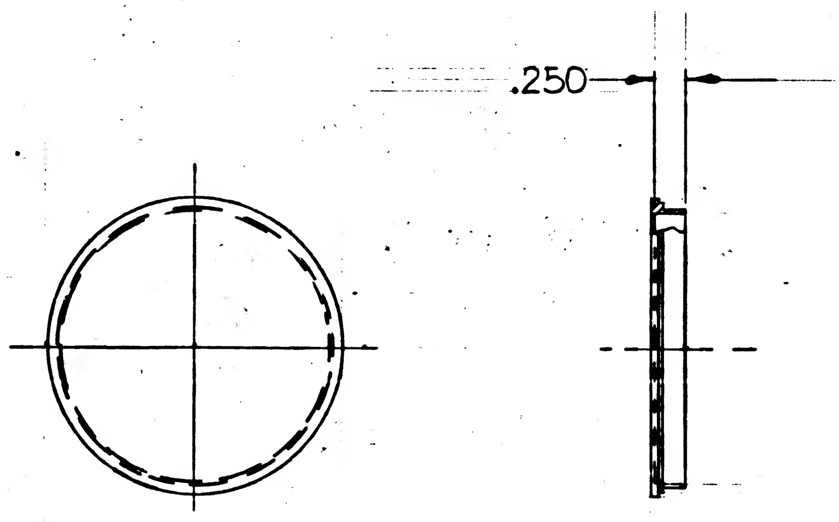
CODE IDENT NO.	SIZE	NASA NUMBER
89944	C	1022335

SCALE 1/1 WEIGHT CALC ACTUAL SHEET 1 OF 1

AD-1340

REVISIONS 23053				
SYM	ZONE	DESCRIPTION	DATE	APPROVAL
REV	–	CLASS "A" RELEASE PER TDAR		

NOTES:
1. INTERPRET DWG PER MIL-D-70327
2. GENERAL MACHINING STANDARDS PER ND 1002078
3. REMOVE BURRS PER ND 1002079
4. FINISH 125√ UNLESS OTHERWISE SPECIFIED.
5. FOR MATERIAL USE P/N 1001886-002 *
6. IDENTIFY USING NASA DRAWING NUMBER, AND MANUFACTURER'S SYMBOL PER ND1002019 (BAGGED OR TAGGED)



ITEM NO.	QTY REQD	SYM	GOVERNMENT/NASA NO.	KOLLSMAN PART NO.	CODE IDENT	NOMENCLATURE OR DESCRIPTION	MATERIAL	SPECIFICATION	UNIT WT

LIST OF PARTS AND MATERIALS

* VENDOR ITEM: SEE SOURCE CONTROL OR SPECIFICATION CONTROL DRAWING.

MASTER

1022880	1022880
NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES

TOL ON	FRACTIONS	DECIMALS	ANGLES
	± ~	±.031	± ~

DO NOT SCALE THIS DRAWING

MATERIAL: SEE NOTE 5

CONTRACT: NAS 9-497

KOLLSMAN INSTRUMENT CORPORATION
ELMHURST NEW YORK
KIC PN 03386911330

DRAWN E.J. ROHL DATE 5-10-65
CHECKED L. K. [illegible] 6-19-65
APPROVAL [illegible]
APPROVAL
NOT REQUIRED PER LETTER NASA PP7-65-612
NASA APPROVAL
MIT APPROVAL [illegible] 6-1-65

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

TITLE COVER, LENS
(HOUSING SCT PRISM)
ALTERED COMMERICAL STANDARD

CODE IDENT NO.	SIZE	NASA NUMBER
89944	C	1022336

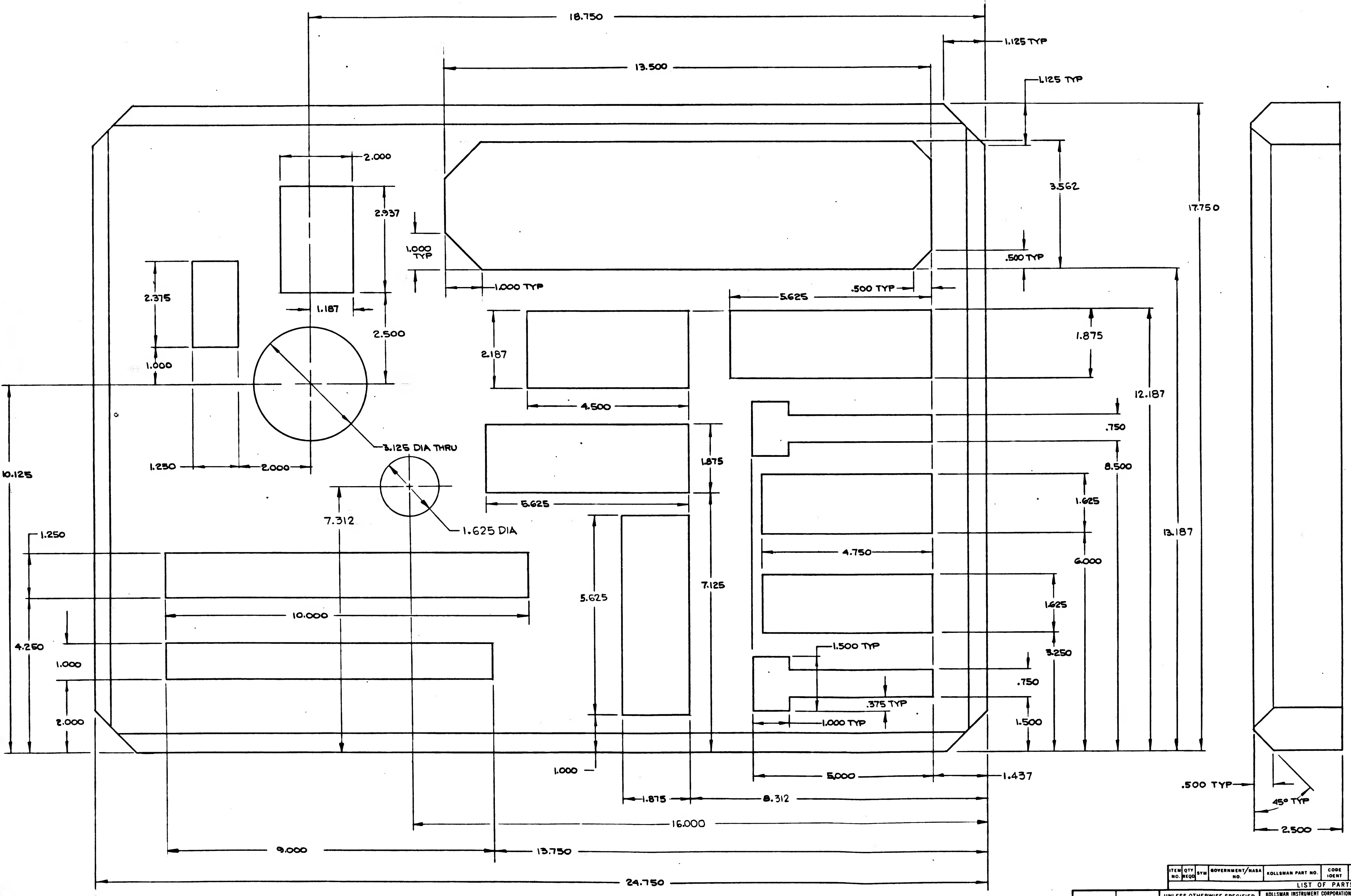
SCALE 1/1 WEIGHT CALC ACTUAL SHEET 1 OF 1

AD-1340

REVISIONS 20503			6-28-65	
SYM	ZONE	DESCRIPTION	DATE	APPROVAL

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH MIL-D-70327
2. MATERIAL- POLYURETHANE FOAM, COLOR-GRAY, DENSITY 4LBS PER CU FT PER MIL-P-26514, TYPE I, CLASS 2
3. IDENTIFY USING NASA DRAWING NO, REV LETTER AND MANUFACTURERS SYM PER ND1002019 (BAGGED OR TAGGED)



ITEM NO.	QTY REQD	SYM	GOVERNMENT/NASA NO.	KOLLSMAN PART NO.	CODE IDENT	NOMENCLATURE OR DESCRIPTION	MATERIAL	SPECIFICATION	UNIT WT

LIST OF PARTS AND MATERIALS

1022883	1019984
NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES

TOL ON	FRACTIONS	DECIMALS	ANGLES
	± —	±.062	± 5°

DO NOT SCALE THIS DRAWING

MATERIAL
SEE NOTE 2

CONTRACT

KOLLSMAN INSTRUMENT CORPORATION
ELMHURST NEW YORK
KIC PN 03386911273

DRAWN R CARROLL DATE 6-14-65
CHECKED [illegible] 6-15-65
APPROVAL [illegible] 6-15-65
APPROVAL
NASA APPROVAL [illegible] 6-16-65
MIT APPROVAL [illegible] 6-24-65

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

TITLE
PAD, CUSHION, BASE

CODE IDENT NO.	SIZE	NASA NUMBER
89944	E	1022338

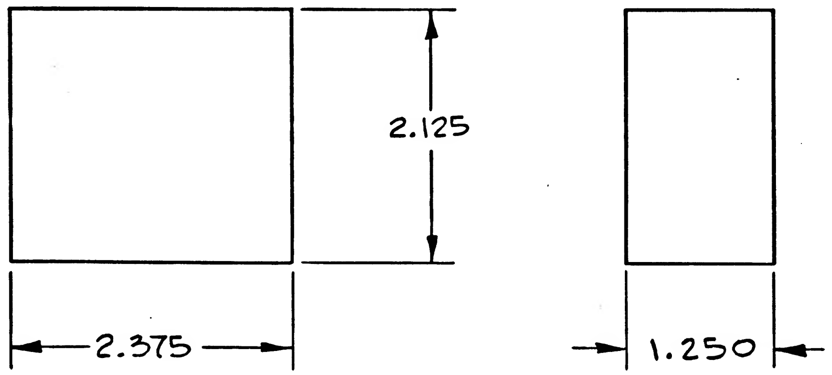
SCALE 1/1 WEIGHT CALC ACTUAL SHEET OF 1

1022338

REVISIONS 20503 6/28/65				
SYM	ZONE	DESCRIPTION	DATE	APPROVAL

NOTES:

1. INTERPRET DWG PER MIL-D-70327.
2. MATERIAL: POLYURETHANE FOAM, COLOR GRAY, DENSITY- 4 LBS PER CU FT PER MIL-P-26514, TYPE I, CLASS 2.
3. IDENTIFY USING NASA DWG NO., REVISION LETTER AND MANUFACTURER'S SYMBOL PER ND 1002019 (BAGGED).



ITEM NO.	QTY REQD	SYM	GOVERNMENT/NASA NO.	KOLLSMAN PART NO.	CODE IDENT	NOMENCLATURE OR DESCRIPTION	MATERIAL	SPECIFICATION	UNIT WT

LIST OF PARTS AND MATERIALS

NEXT ASSY	USED ON
1022883	1019984

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES

TOL ON	FRACTIONS	DECIMALS	ANGLES
	± ~	±.062	± ~

DO NOT SCALE THIS DRAWING

MATERIAL SEE NOTE 2

CONTRACT

KOLLSMAN INSTRUMENT CORPORATION
ELMHURST NEW YORK
KIC PN 03386911267

DRAWN AJ PERALTA DATE 5-4-65
CHECKED N. Kepler 5-5-65
APPROVAL
APPROVAL
NASA APPROVAL
6-16-65
MIT APPROVAL 6-28-65

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

TITLE
FILLER, LOWER
(GAUGE, REGULATOR)

CODE IDENT NO.	SIZE	NASA NUMBER
89944	C	1022342

SCALE 1:1 WEIGHT CALC ACTUAL SHEET 1 OF 1

MASTER

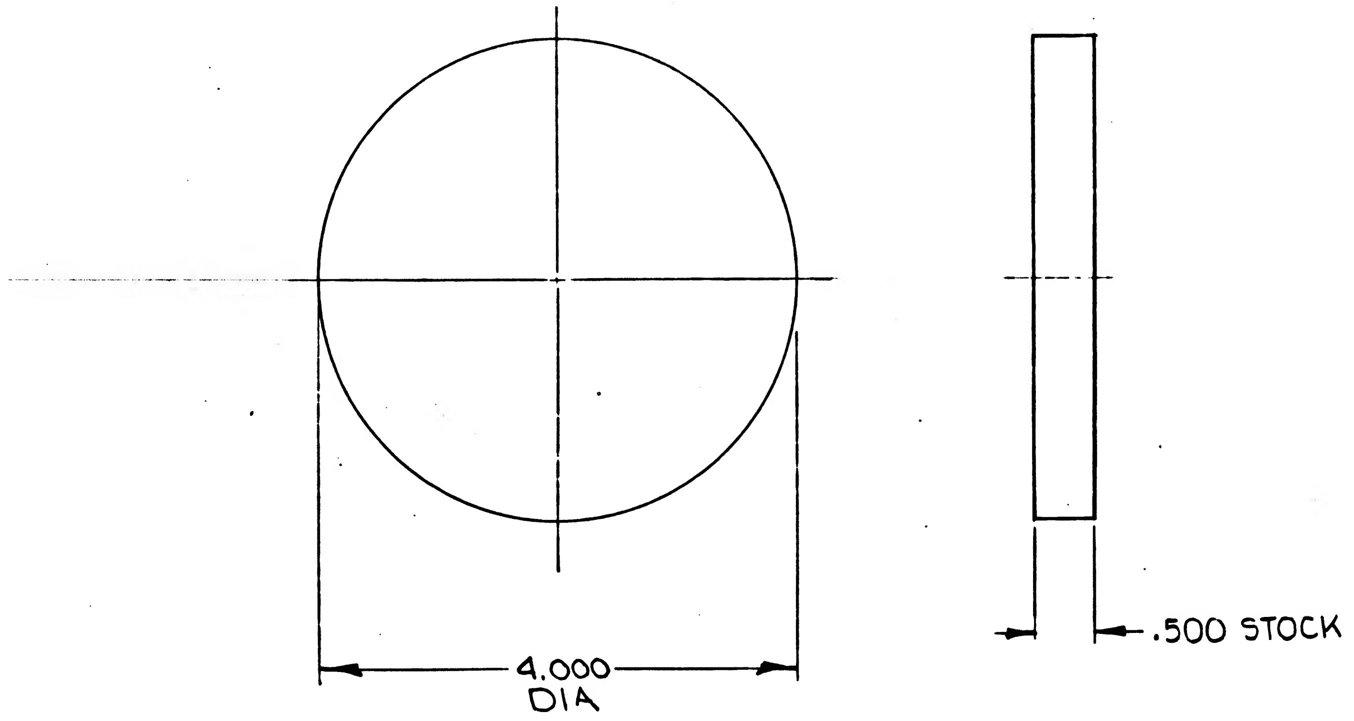
AD-1340

SYM	ZONE	DESCRIPTION	DATE	APPROVAL

REVISIONS 20503 6/28/65

NOTES:

1. -INTERPRET DRAWING PER MIL-D-70327
2. -MATERIAL: POLYURETHANE FOAM, COLOR GRAY, DENSITY 4 LBS PER CU FT PER MIL-P-26514 TYPE I, CLASS 2.
3. - IDENTIFY USING NASA DWG NO., REVISION LETTER AND MANUFACTURER'S SYMBOL PER ND 1002019 (BAGGED).



ITEM NO.	QTY REQD	SYM	GOVERNMENT/NASA NO.	KOLLSMAN PART NO.	CODE IDENT	NOMENCLATURE OR DESCRIPTION	MATERIAL	SPECIFICATION	UNIT WT

LIST OF PARTS AND MATERIALS

1022882	1019984
NEXT ASSY	USED ON

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES

TOL ON	FRACTIONS	DECIMALS	ANGLES
	± ~	± .062	± ~

DO NOT SCALE THIS DRAWING

MATERIAL SEE NOTE 2

CONTRACT

KOLLSMAN INSTRUMENT CORPORATION
ELMHURST NEW YORK
KIC PN 033869111263

DRAWN J. CALDILE DATE 4-30-65
CHECKED N. Ketko 5-6-65
APPROVAL 5-8-65
APPROVAL
NASA APPROVAL A. C. 6-16-65
MIT APPROVAL McNerney 6-16-65

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

TITLE FILLER, UPPER (REGULATOR)

CODE IDENT NO. 89944
SIZE C
NASA NUMBER 1022348
SCALE 1 : 1
WEIGHT CALC ACTUAL
SHEET 1 OF 1

wA

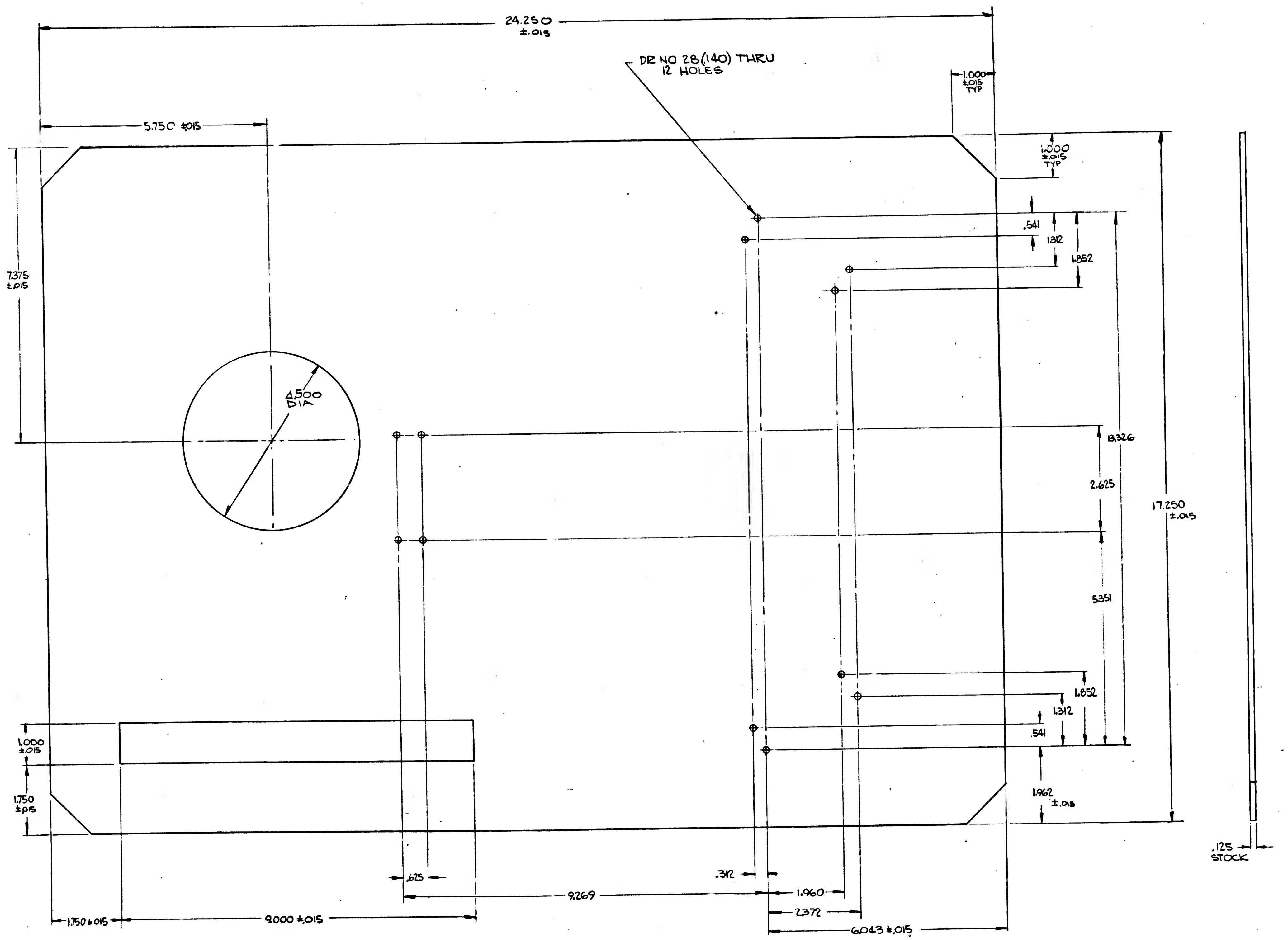
MASTER

AD-1340

1022348

SYM	ZONE	DESCRIPTION	DATE	APPROVAL
REVISIONS 20503			6-28-65	

NOTES:
1. INTERPRET DRAWING PER MIL-D-70327.
2. GENERAL MACHINING STANDARDS PER ND1002078.
3. REMOVE BURRS PER ND1002079.
4. FINISH 125√ UNLESS OTHERWISE SPECIFIED.
5. ANODIZE BLACK PER MIL-A-8625, TYPE II.
6. IDENTIFY USING NASA DRAWING NO., REVISION LETTER AND MANUFACTURERS SYMBOL PER ND1002019 TAGGED.



ITEM NO.	QTY REQD	SYM	GOVERNMENT/NASA NO.	KOLLSMAN PART NO.	CODE IDENT	NOMENCLATURE OR DESCRIPTION	MATERIAL	SPECIFICATION	UNIT WT

LIST OF PARTS AND MATERIALS

NEXT ASSY	USED ON
1022885	1019984

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOL ON: FRACTIONS ± ~ ; DECIMALS ±.005 ; ANGLES ± ~
DO NOT SCALE THIS DRAWING
MATERIAL ALUMINUM ALLOY 2024-T3
FED SPEC QQ-A-250/4 TEMPER T3
CONTRACT

KOLLSMAN INSTRUMENT CORPORATION
ELMHURST NEW YORK
KIC PN 03386911252
DRAWN [illegible] DATE 6-14-65
CHECKED N. Kotzfar 6-15-65
APPROVAL [illegible] 6-15-65
APPROVAL
NASA APPROVAL A. C. [illegible] 6-16-65
MIT APPROVAL [illegible]

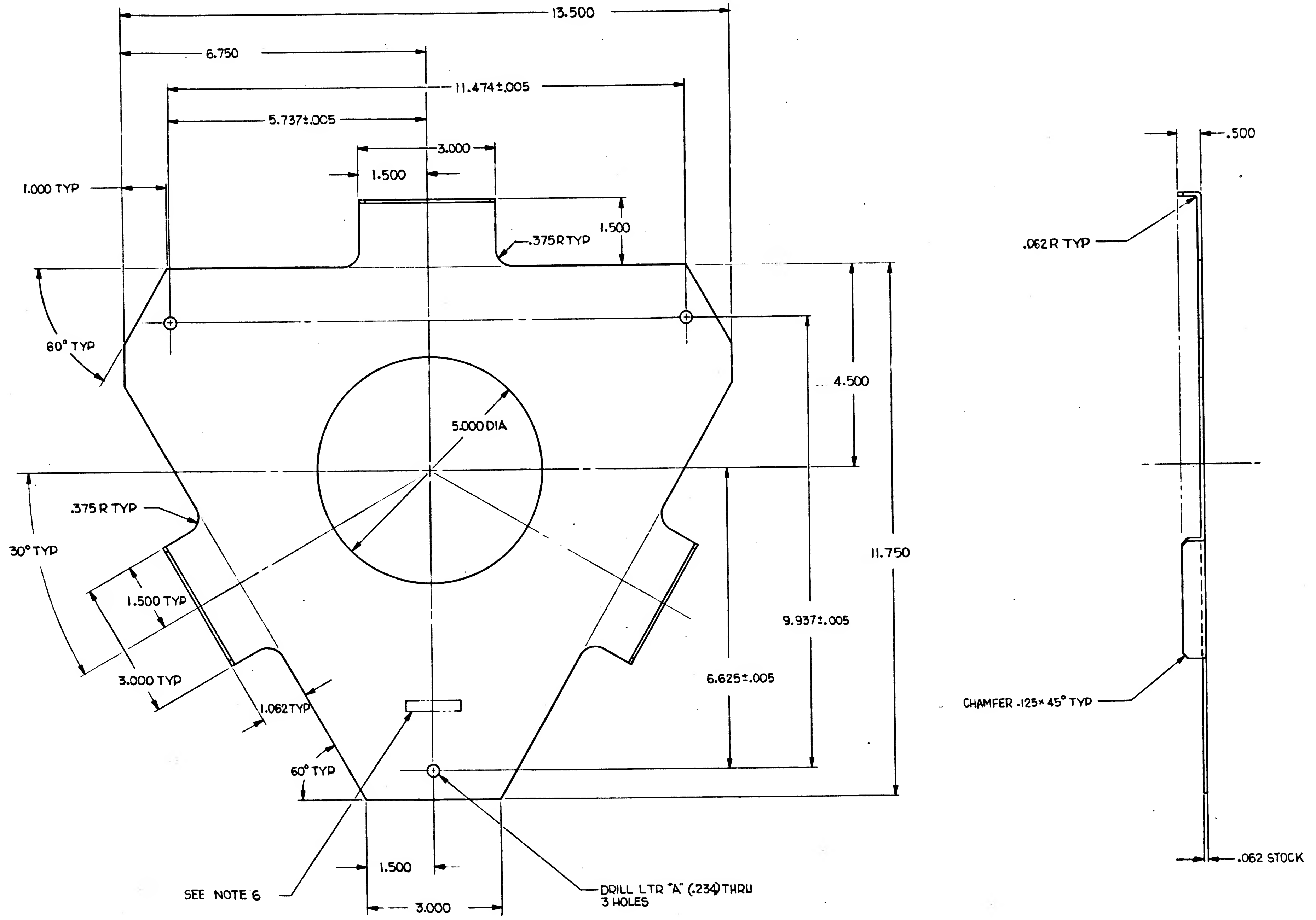
MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

TITLE
SHELF

CODE IDENT NO. 89944
SIZE E
NASA NUMBER 1022350
SCALE 1:1
WEIGHT
CALC ACTUAL
SHEET OF

NOTES:
1- INTERPRET DRAWING PER MIL-D-70327
2- GENERAL MACHINING STANDARDS PER ND 1002078
3- FINISH 125/ UNLESS OTHERWISE SPECIFIED
4- REMOVE BURRS PER ND1002079
5- ANODIZE, BLACK PER MIL-A-8625, TYPE II.
6- IDENTIFY USING NASA DWG NO., REV LETTER AND MFR'S SYMBOL PER ND1002019.

SYM	ZONE	REVISIONS DESCRIPTION	DATE	APPROVAL



ITEM NO.	QTY REQD	SYM	GOVERNMENT/NASA NO.	KOLLSMAN PART NO.	CODE IDENT	NOMENCLATURE OR DESCRIPTION	MATERIAL	SPECIFICATION	UP T WT

LIST OF PARTS AND MATERIALS

NEXT ASSY	USED ON
1022882	1019984

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOL ON: FRACTIONS ± — ; DECIMALS ± .030 ; ANGLES ± 2°
DO NOT SCALE THIS DRAWING
MATERIAL ALUMINUM ALLOY 2024-T3
FED SPEC QQ-A-250/4 TEMPER T3
CONTRACT

KOLLSMAN INSTRUMENT CORPORATION
ELMHURST NEW YORK
KIC PN 03386911275
DRAWN A.S. Andolfi DATE 4-3-65
CHECKED A. Kedzko 5-5-65
APPROVAL 5-7-65
APPROVAL
NASA APPROVAL 6-18-65
MIT APPROVAL 6-25-65

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

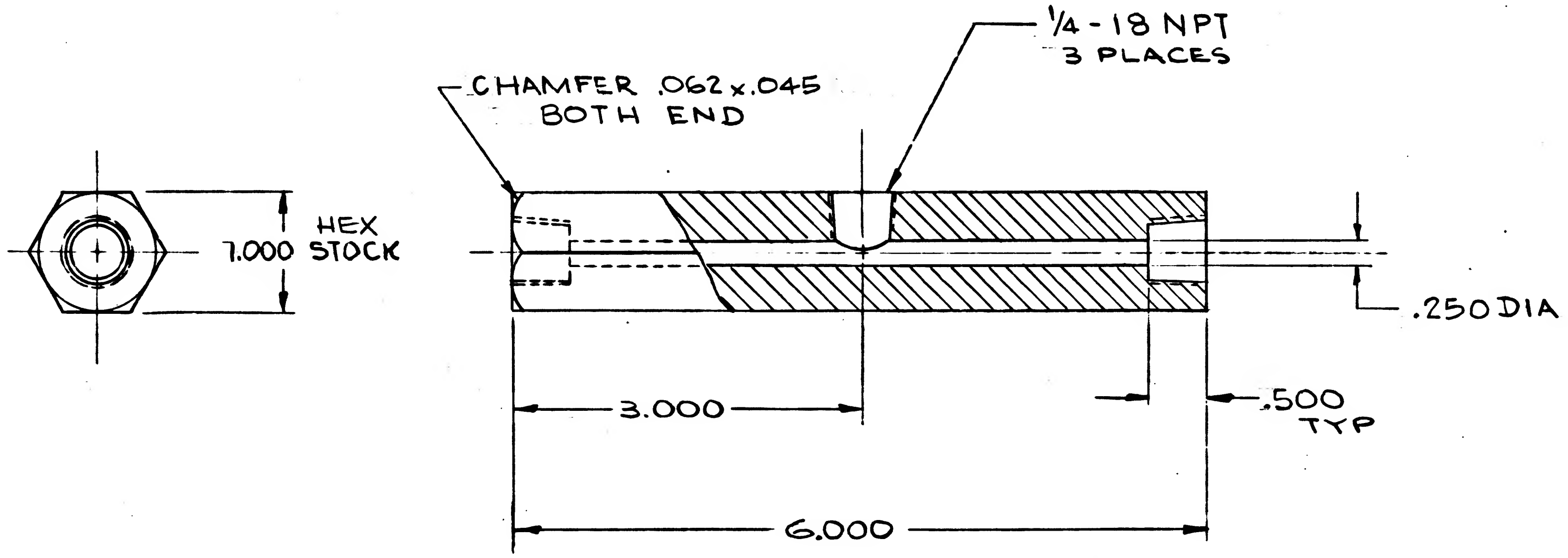
TITLE
BRACKET, HOSE HOLDER

CODE IDENT NO. 89944
SIZE E
NASA NUMBER 1022361
SCALE 1:1
WEIGHT CALC ACTUAL
SHEET 1 OF 1

REVISIONS 20503 6/28/65				
SYM	ZONE	DESCRIPTION	DATE	APPROVAL

NOTES:

1. INTERPRET DRAWING PER MIL-D-70327
2. GENERAL MACHINING STANDARDS PER ND1002078
3. REMOVE BURRS PER ND1002079
4. FINISH 125/ ALL OVER.
5. IDENTIFY USING NASA DWG NO., REV. LETTER AND MANUFACTURER'S SYM PER ND 1002019 (BAGGED OR TAGGED)



MASTER

ITEM NO.	QTY REQD	SYM	GOVERNMENT/NASA NO.	KOLLSMAN PART NO.	CODE IDENT	NOMENCLATURE OR DESCRIPTION	MATERIAL	SPECIFICATION	UNIT WT

LIST OF PARTS AND MATERIALS

1022889	1019984
NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES

TOL ON	FRACTIONS	DECIMALS	ANGLES
	± /	±.015	± 5°

DO NOT SCALE THIS DRAWING

MATERIAL BRASS ASTM B16 TEMP 1/2 H
FED SPEC QQ-B-626, COMP 22, TEMP 1/2 H

CONTRACT

KOLLSMAN INSTRUMENT CORPORATION
ELMHURST NEW YORK

KIC PN 03386910270

DRAWN B Pulver DATE 4/1/65
CHECKED N. Ketzler 5-5-65
APPROVAL [illegible] 6-8-65
APPROVAL

NASA APPROVAL [illegible] 6-16-65

MIT APPROVAL [illegible] 6-28-65

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

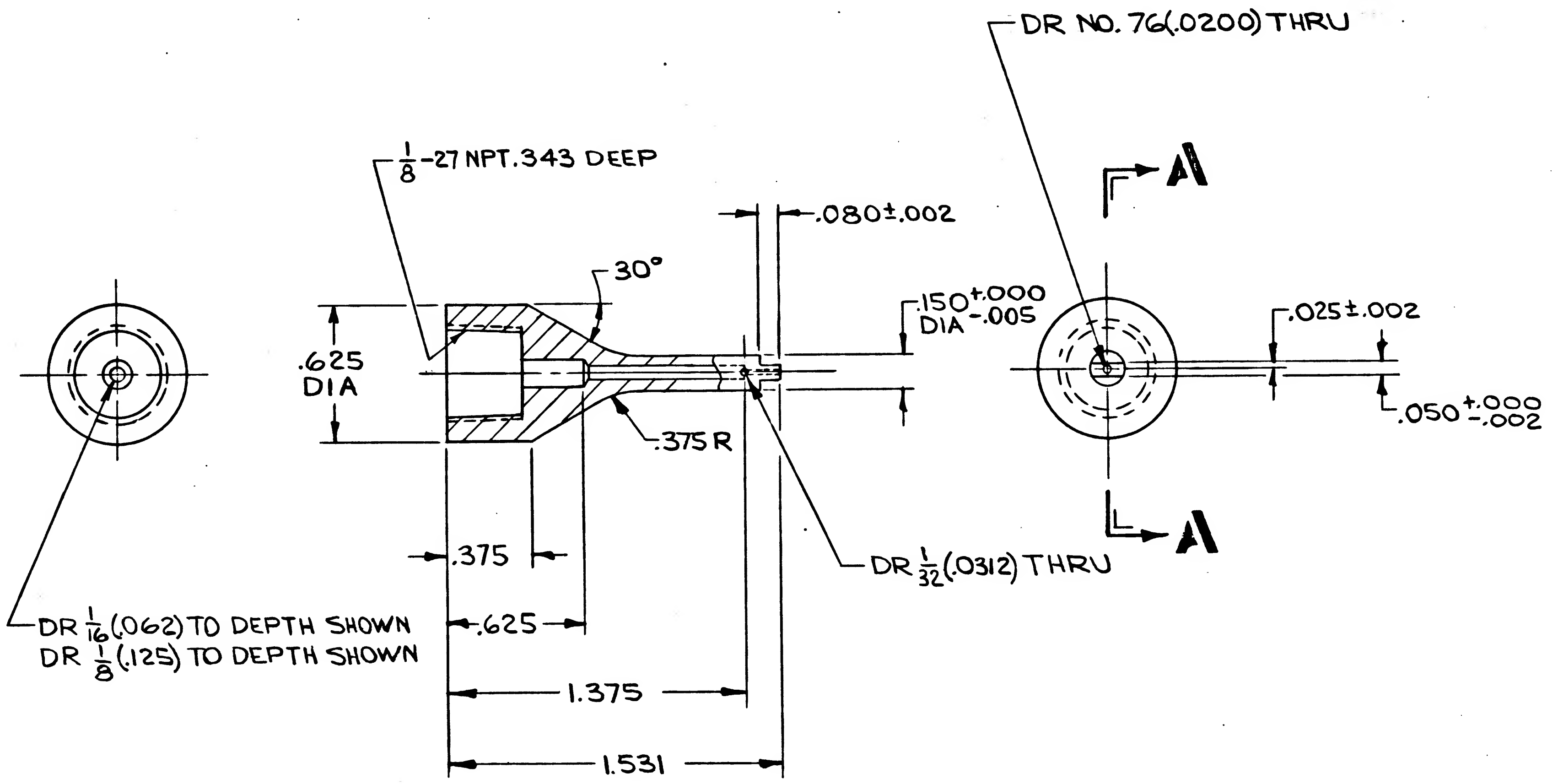
TITLE
COUPLING

CODE IDENT NO.	SIZE	NASA NUMBER	
89944	C	1022368	
SCALE 1:1	WEIGHT	CALC ACTUAL	SHEET 1 OF 1

WA

REVISIONS 20503 6/28/65				
SYM	ZONE	DESCRIPTION	DATE	APPROVAL

NOTES:
1. INTERPRET DWG PER MIL-D-70327
2. GENERAL MACHINING STANDARDS PER ND 1002078.
3. REMOVE BURRS PER ND 1002079.
4. FINISH $\sqrt{}^{125}$ UNLESS OTHERWISE SPECIFIED.
5. PASSIVATE PER MIL-STD-171, FINISH NO. 5.4.1.
6. IDENTIFY USING NASA DWG NO., REVISION LETTER AND MANUFACTURER'S SYMBOL PER ND 1002019 (BAGGED OR TAGGED)



SECTION A-A

MASTER

ITEM NO.	QTY REQD	SYM	GOVERNMENT/NASA NO.	KOLLSMAN PART NO.	CODE IDENT	NOMENCLATURE OR DESCRIPTION	MATERIAL	SPECIFICATION	UNIT WT

LIST OF PARTS AND MATERIALS

NEXT ASSY	USED ON
1022891	1019984

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES

TOL ON	FRACTIONS	DECIMALS	ANGLES
	± #	±.005	± 1°

DO NOT SCALE THIS DRAWING
MATERIAL STAINLESS STEEL AISI 416
FED. SPEC- QQ-S-763 CLASS 416 COND A
CONTRACT

KOLLSMAN INSTRUMENT CORPORATION
ELMHURST NEW YORK
KIC PN 03386911279
DRAWN M. SCHORR DATE 5-4-65
CHECKED N. Kettle 5-7-65
APPROVAL [illegible] 5-7-65
APPROVAL
NASA APPROVAL A. C. [illegible] [illegible] 6-16-65
MIT APPROVAL M G Hurley 6-28-65

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

TITLE
FITTING, GAS INJECTION

CODE IDENT NO.	SIZE	NASA NUMBER
89944	C	1022371

SCALE 2/1 WEIGHT CALC ACTUAL SHEET 1 OF 1

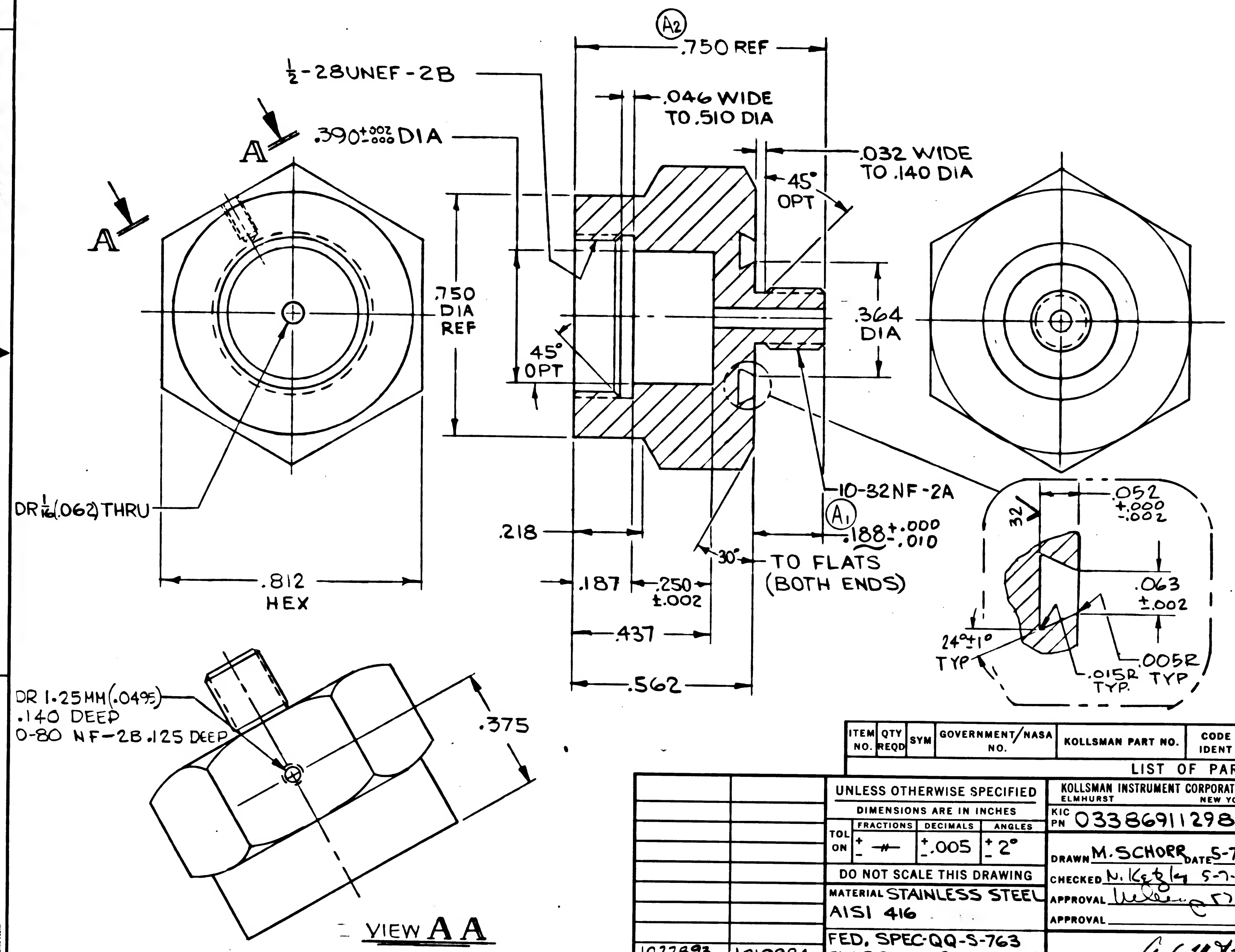
AD-1340

WA

NOTE:
1. INTERPRET DWG PER MIL-D-70327.
2. GENERAL MACHINING STANDARD PER ND 1002078.
3. REMOVE BURRS PER ND 1002079.
4. FINISH 125√ UNLESS OTHERWISE SPECIFIED.
5. PASSIVATE PER MIL-STD-171, FINISH NO. 5.4.1.
6. IDENTIFY USING NASA DWG NO., REVISION LETTER AND MANUFACTURER'S SYMBOL PER ND 1002019 (BAGGED).

REVISIONS 20503 6/28/65

SYM	ZONE	DESCRIPTION	DATE	APPROVAL
A₂		REVISED PER ECO 111973 TDRR 22403 DATE 9/14/65	9/22/65 E.J.R.	UH 9-23-65



ITEM NO.	QTY REQD	SYM	GOVERNMENT/NASA NO.	KOLLSMAN PART NO.	CODE IDENT	NOMENCLATURE OR DESCRIPTION	MATERIAL	SPECIFICATION	UNIT WT

LIST OF PARTS AND MATERIALS

NEXT ASSY	USED ON
1022893	1019984

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES

TOL ON	FRACTIONS	DECIMALS	ANGLES
	± —	±.005	±2°

DO NOT SCALE THIS DRAWING
MATERIAL STAINLESS STEEL AISI 416
FED. SPEC-QQ-S-763 CLASS 416 CONDITION A
CONTRACT

KOLLSMAN INSTRUMENT CORPORATION
ELMHURST NEW YORK
KIC PN 03386911298
DRAWN M. SCHORR DATE 5-7-65
CHECKED N. Kezby 5-7-65
APPROVAL 5-7-65
APPROVAL
NASA APPROVAL 6-16-65
MIT APPROVAL 6-24-65

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

TITLE
ADAPTER, HOUSING

CODE IDENT NO.	SIZE	NASA NUMBER
89944	C	1022372

SCALE 4/1 WEIGHT CALC ACTUAL SHEET 1 OF 1

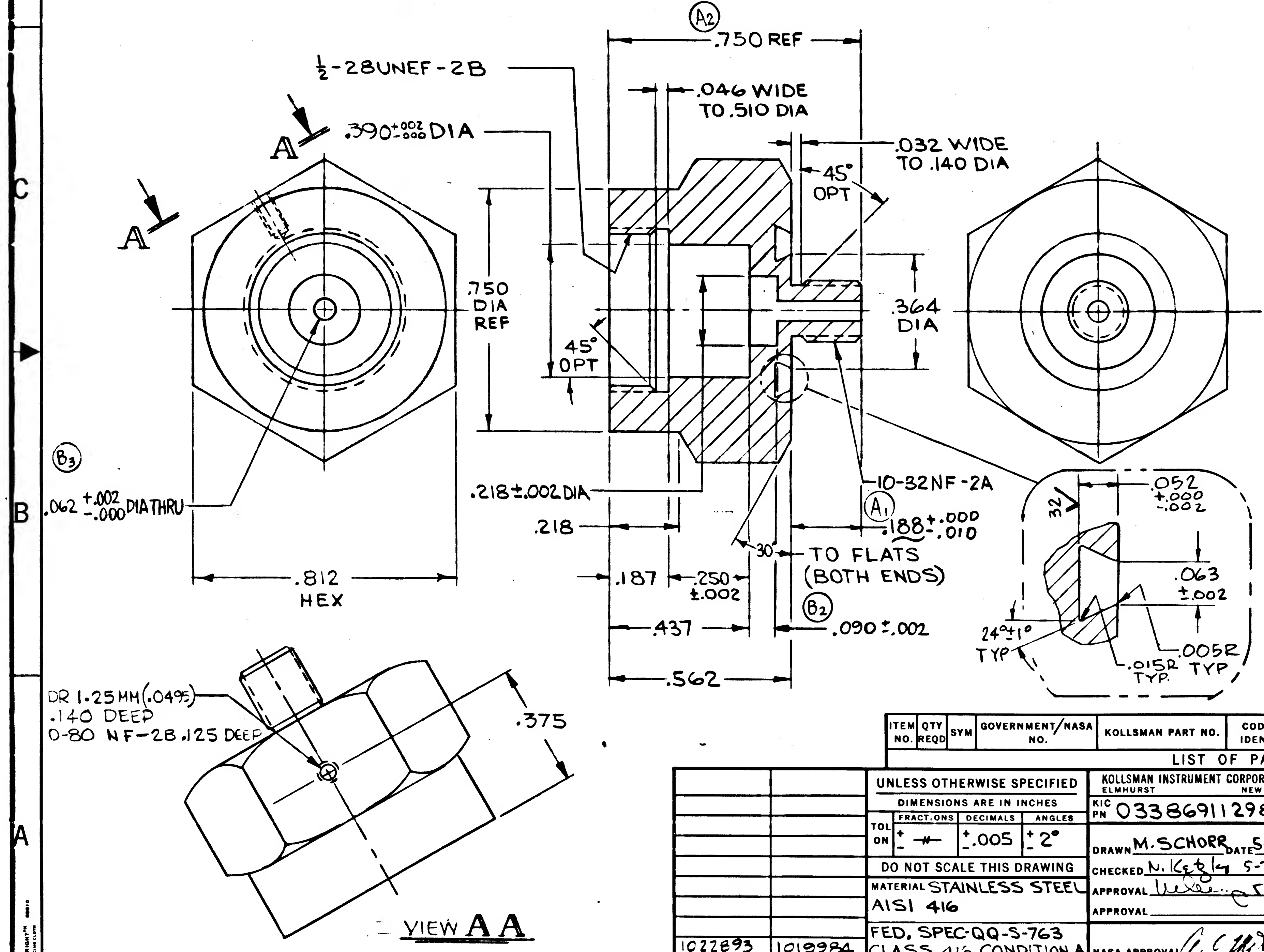
WA

1022372 A

AD-1340

NOTE:
1. INTERPRET DWG PER MIL-D-70327.
2. GENERAL MACHINING STANDARD PER ND 1002078.
3. REMOVE BURRS PER ND 1002079.
4. FINISH $\overset{125}{\surd}$ UNLESS OTHERWISE SPECIFIED.
5. PASSIVATE PER MIL-STD-171, FINISH NO. 5.4.1.
6. IDENTIFY USING NASA DWG NO., REVISION LETTER AND MANUFACTURER'S SYMBOL PER ND 1002019 (BAGGED).

REVISIONS 20503 6/28/65				
SYM	ZONE	DESCRIPTION	DATE	APPROVAL
A2		REVISED PER ECO 111973 TDRR 22403 DATE 9/14/65	9/22/65 E.J.R.	VH 9-23-65
B3		REVISED PER ECO 116078 TDRR G27285 DATE 3-16-66	3-18-66	3/18/66



ITEM NO.	QTY REQD	SYM	GOVERNMENT/NASA NO.	KOLLSMAN PART NO.	CODE IDENT	NOMENCLATURE OR DESCRIPTION	MATERIAL	SPECIFICATION	UNIT WT

LIST OF PARTS AND MATERIALS

1022893	1019984
NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES

TOL ON	FRACTIONS	DECIMALS	ANGLES
	± —	±.005	±2°

DO NOT SCALE THIS DRAWING
MATERIAL STAINLESS STEEL AISI 416
FED. SPEC-QQ-S-763 CLASS 416 CONDITION A
CONTRACT NAS 9-497

KOLLSMAN INSTRUMENT CORPORATION
ELMHURST NEW YORK
KIC PN 03386911298
DRAWN M. SCHORR DATE 5-7-65
CHECKED N. Kezbly 5-7-65
APPROVAL 5-7-65
APPROVAL
NASA APPROVAL 6-16-65
MIT APPROVAL 6-16-65

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

TITLE
ADAPTER, HOUSING

CODE IDENT NO. 89944
SIZE C
NASA NUMBER 1022372
SCALE 4/1
WEIGHT CALC ACTUAL
SHEET 1 OF 1

1022372 B

AD-1340

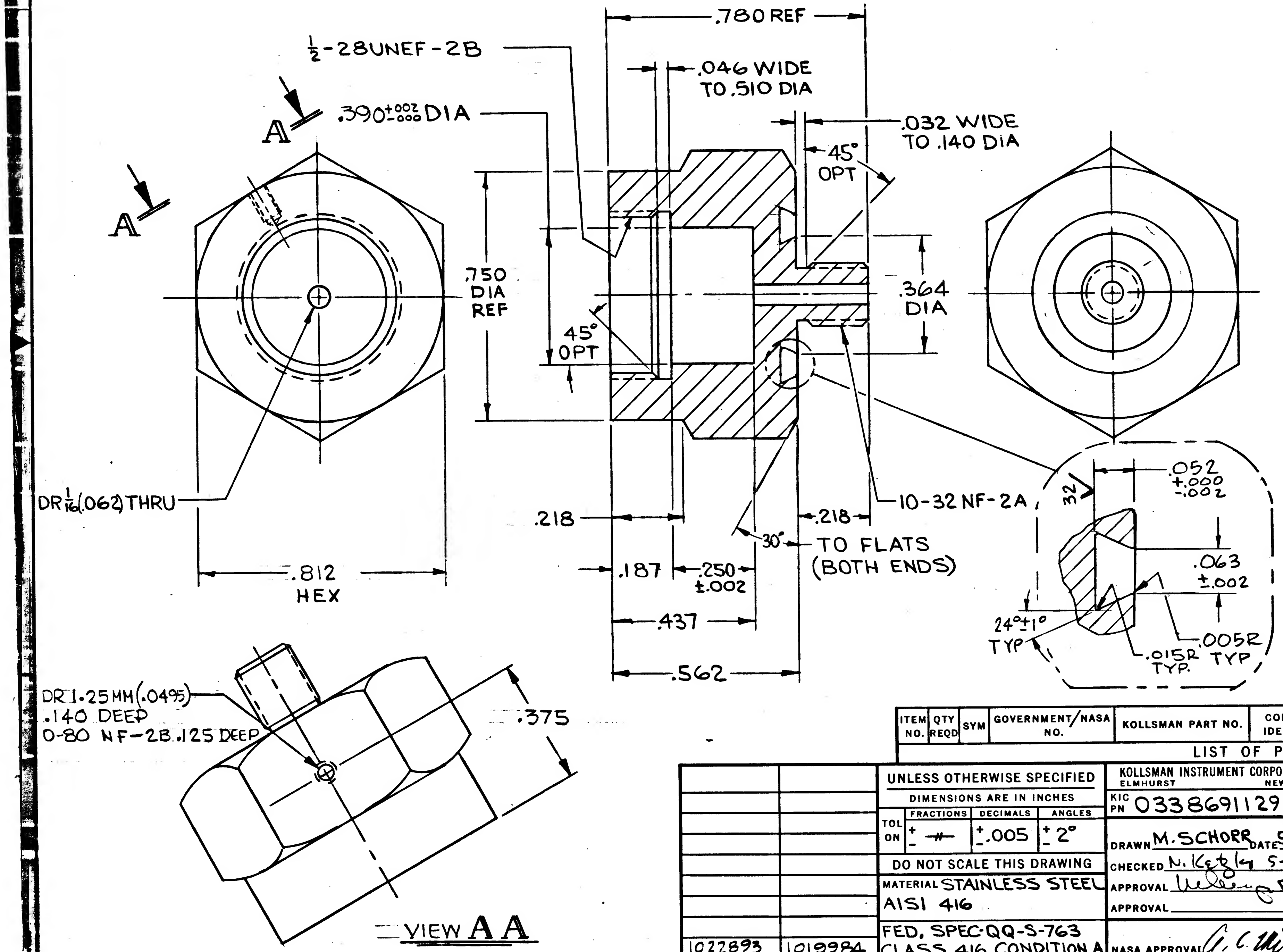
	6	5	4	3	2	1

REVISIONS 20503 6/28/65

SYM	ZONE	DESCRIPTION	DATE	APPROVAL

NOTE:

1. INTERPRET DWG PER MIL-D-70327.
2. GENERAL MACHINING STANDARD PER ND 1002078.
3. REMOVE BURRS PER ND 1002079.
4. FINISH 125√ UNLESS OTHERWISE SPECIFIED.
5. PASSIVATE PER MIL-STD-171, FINISH NO. 5.4.1.
6. IDENTIFY USING NASA DWG NO., REVISION LETTER AND MANUFACTURER'S SYMBOL PER ND 1002019 (BAGGED).



ITEM NO.	QTY REQD	SYM	GOVERNMENT/NASA NO.	KOLLSMAN PART NO.	CODE IDENT	NOMENCLATURE OR DESCRIPTION	MATERIAL	SPECIFICATION	UNIT WT

LIST OF PARTS AND MATERIALS

NEXT ASSY	USED ON
1022893	1019984

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES

TOL ON	FRACTIONS	DECIMALS	ANGLES
	± —	±.005	±2°

DO NOT SCALE THIS DRAWING
MATERIAL STAINLESS STEEL AISI 416
FED. SPEC-QQ-S-763 CLASS 416 CONDITION A
CONTRACT

KOLLSMAN INSTRUMENT CORPORATION
ELMHURST NEW YORK
KIC PN 03386911298
DRAWN M. SCHORR DATE 5-7-65
CHECKED N. Kegley 5-7-65
APPROVAL [illegible] 5-7-65
APPROVAL
NASA APPROVAL C. C. [illegible] 6-16-65
MIT APPROVAL [illegible] 6-28-65

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

TITLE
ADAPTER, HOUSING

CODE IDENT NO. 89944
SIZE C
NASA NUMBER 1022372
SCALE 4/1
WEIGHT CALC ACTUAL
SHEET 1 OF 1

wA

AD-1340

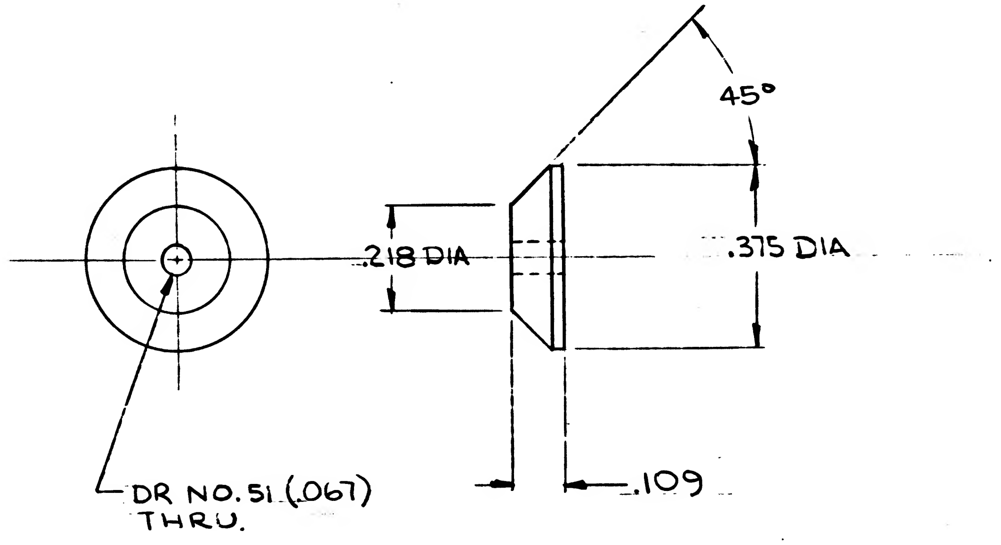
6	5	4	3	2	1

NOTES:

1. INTERPRET DRAWING PER MIL-D-70327.
2. IDENTIFY USING NASA DWG NO., REV LETTER, AND MFR'S SYM PER ND 100 2019 (BAGGED OR TAGGED)

REVISIONS 20503 6/28/65

SYM	ZONE	DESCRIPTION	DATE	APPROVAL



ITEM NO.	QTY REQD	SYM	GOVERNMENT/NASA NO.	KOLLSMAN PART NO.	CODE IDENT	NOMENCLATURE OR DESCRIPTION	MATERIAL	SPECIFICATION	UNIT WT

LIST OF PARTS AND MATERIALS

NEXT ASSY	USED ON
1022894	1019984

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES

TOL ON	FRACTIONS	DECIMALS	ANGLES
	± —	± .010	± 2°

DO NOT SCALE THIS DRAWING
MATERIAL RUBBER, BUNA N, 60 DURO
MIL-R-6855, CLASS I, GRADE 60
CONTRACT

KOLLSMAN INSTRUMENT CORPORATION
ELMHURST NEW YORK
KIC PN 03386911300
DRAWN B. PULVER DATE 5-6-65
CHECKED N. [illegible] 5-7-65
APPROVAL [illegible] 5-7-65
APPROVAL
NASA APPROVAL A. C. [illegible] 6-16-65
MIT APPROVAL [illegible] 6-28-65

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

TITLE
PLUG

CODE IDENT NO. 89944
SIZE C
NASA NUMBER 1022374
SCALE 4:1
WEIGHT CALC ACTUAL
SHEET 1 OF 1

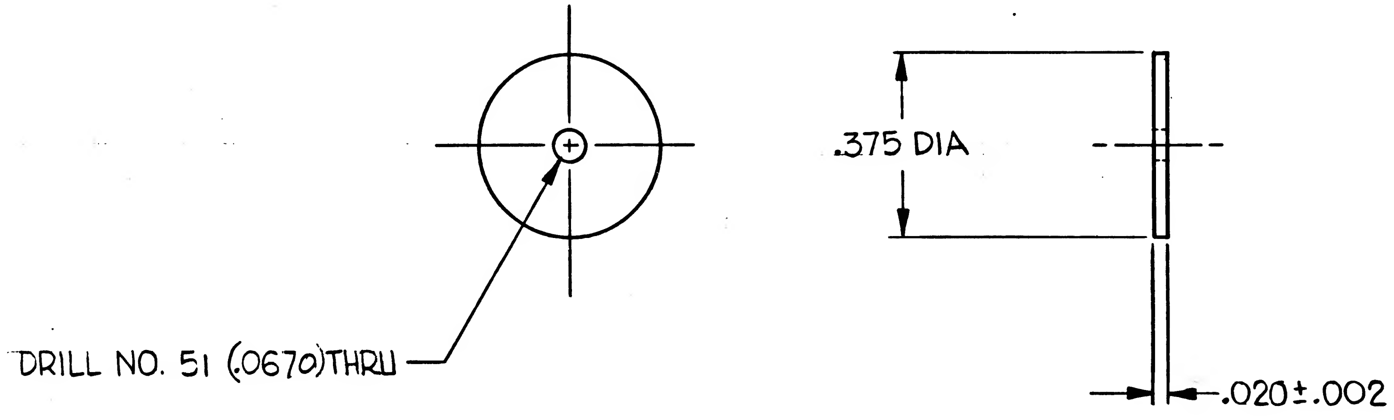
WA

AD-1340

NOTES:
1- INTERPRET DRAWING PER MIL-D-70327
2- GENERAL MACHINING STANDARD PER ND1002078
3- REMOVE BURRS PER ND 1002079
4- FINISH 125√ UNLESS OTHERWISE SPECIFIED
5- PASSIVATE PER MIL-STD-171, FINISH NO. 5.4.1.
6- IDENTIFY USING NASA DRAWING NUMBER, REVISION LETTER AND MANUFACTURER'S SYMBOL ND1002019 (BAGGED OR TAGGED).

REVISIONS 20503 6/28/65

SYM	ZONE	DESCRIPTION	DATE	APPROVAL



ITEM NO.	QTY REQD	SYM	GOVERNMENT/NASA NO.	KOLLSMAN PART NO.	CODE IDENT	NOMENCLATURE OR DESCRIPTION	MATERIAL	SPECIFICATION	UNIT WT

LIST OF PARTS AND MATERIALS

NEXT ASSY	USED ON
1022894	1019984

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES

TOL ON	FRACTIONS	DECIMALS	ANGLES
	± —	±.005	± —

DO NOT SCALE THIS DRAWING
MATERIAL STAINLESS STEEL AISI 416
FED SPEC QQ-S-763 CLASS 416, CONDA
CONTRACT

KOLLSMAN INSTRUMENT CORPORATION
ELMHURST NEW YORK
KIC PN 03386911301
DRAWN A.S.Andolfi DATE 4-6-65
CHECKED N. Ketzler 5-7-65
APPROVAL
APPROVAL
NASA APPROVAL 6-16-65
MIT APPROVAL 6-4-65

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

TITLE WASHER

CODE IDENT NO. 89944
SIZE C
NASA NUMBER 1022375
SCALE 4:1
WEIGHT CALC ACTUAL
SHEET 1 OF 1

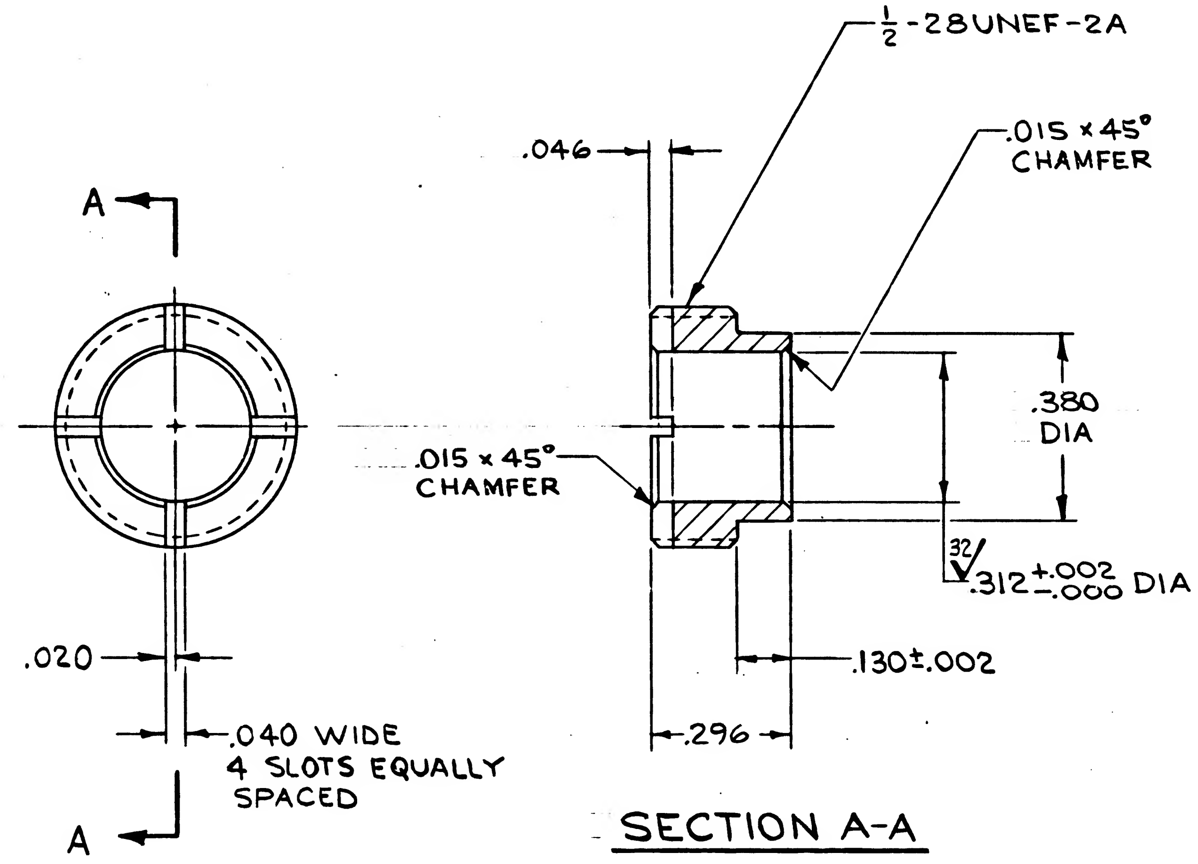
WA

MASTER

REVISIONS 20503 6/28/65				
SYM	ZONE	DESCRIPTION	DATE	APPROVAL

NOTES:

1. INTERPRET DWG PER MIL-D-70323.
2. GENERAL MACHINING STANDARDS PER ND1002078
3. REMOVE BURRS PER ND1002079.
4. FINISH $\overset{125}{\checkmark}$ UNLESS OTHERWISE SPECIFIED.
5. PASSIVATE PER MIL-STD-171, FINISH NO. 5.4.1.
6. IDENTIFY USING NASA DWG NO., REV LETTER AND MFR'S SYM PER ND 1002019 (BAGGED TAGGED)



ITEM NO.	QTY REQD	SYM	GOVERNMENT/NASA NO.	KOLLSMAN PART NO.	CODE IDENT	NOMENCLATURE OR DESCRIPTION	MATERIAL	SPECIFICATION	UNIT WT

LIST OF PARTS AND MATERIALS

1022893	1019984
NEXT ASSY	USED ON

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES

TOL ON	FRACTIONS	DECIMALS	ANGLES
	± —	±.005	± 2°

DO NOT SCALE THIS DRAWING
MATERIAL STAINLESS STEEL AISI 416
FED SPEC QQ-S-763 CLASS 416, CONDITION A
CONTRACT

KOLLSMAN INSTRUMENT CORPORATION
ELMHURST NEW YORK
KIC PN 03386911308
DRAWN M. SCHORR DATE 5-7-65
CHECKED N. Kephar 5-7-65
APPROVAL [illegible] 5-7-65
APPROVAL
NASA APPROVAL A.C. Metzger
W. L. Lott 6-16-65
MIT APPROVAL [illegible] 6-28-65

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

TITLE
NUT, RETAINING

CODE IDENT NO.	SIZE	NASA NUMBER
89944	C	1022378

SCALE 4/1 WEIGHT CALC ACTUAL SHEET 1 OF 1

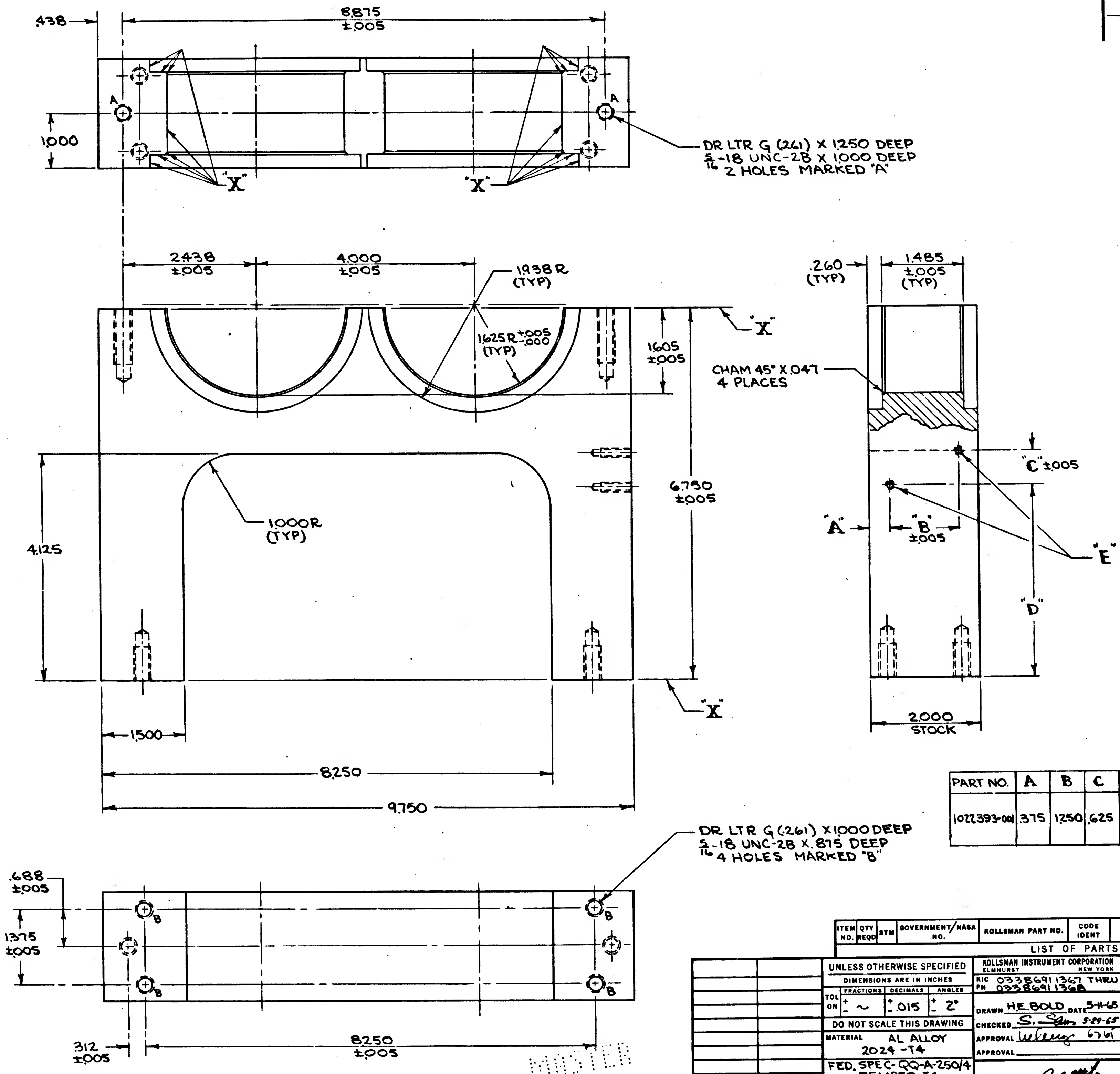
AD-1340

WA

SYM	ZONE	DESCRIPTION	DATE	APPROVAL
REVISIONS				
	–	CLASS A RELEASE PER TDRR Z 1728		

NOTES:-

1- INTERPRET DWG PER MIL-D-70327
2- GENERAL MACHINING STANDARDS PER ND1002078
3- REMOVE BURRS PER ND1002079
4- FINISH $\sqrt{125}$ ALL MACHINED SURFACES
5- FINISH:
  A- CHEMICAL FILM PER MIL-C-5541, GR C, CL 2
  B- APPLY ONE COAT OF ZINC CHROMATE PRIMER PER MIL-P-8585 AND TWO COATS OF CASHMERE BLUE ENAMEL PER NASA DWG NO. 1016194 TO ALL SURFACES EXCEPT THOSE MARKED "X" AND TAPPED HOLES.
6- IDENTIFY USING NASA DWG NO., REVISION LETTER AND MANUFACTURERS SYMBOL PER ND1002019 (BAGGED OR TAGGED).



PART NO.	A	B	C	D	E
1022393-001	.375	1.250	.625	3.500	DR NO. 29 (.1360) X .688 DEEP NO. 8-32 NC-2B X .562 DEEP

ITEM NO.	QTY REQD	SYM	GOVERNMENT/NASA NO.	KOLLSMAN PART NO.	CODE IDENT	NOMENCLATURE OR DESCRIPTION	MATERIAL	SPECIFICATION	UNIT WT

LIST OF PARTS AND MATERIALS

NEXT ASSY	USED ON
1022912	1019977

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES

TOL ON	FRACTIONS	DECIMALS	ANGLES
	± ~	± .015	± 2°

DO NOT SCALE THIS DRAWING
MATERIAL AL ALLOY 2024 -T4
FED. SPEC- QQ-A-250/4 TEMPER T4
CONTRACT NAS 9-497

KOLLSMAN INSTRUMENT CORPORATION
ELMHURST NEW YORK
KIC 03386911367 THRU
PN 0338691136B
DRAWN H.E. BOLD DATE 5-11-65
CHECKED S. Sam 5-29-65
APPROVAL 6-7-65
APPROVAL
NASA APPROVAL
MIT APPROVAL

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

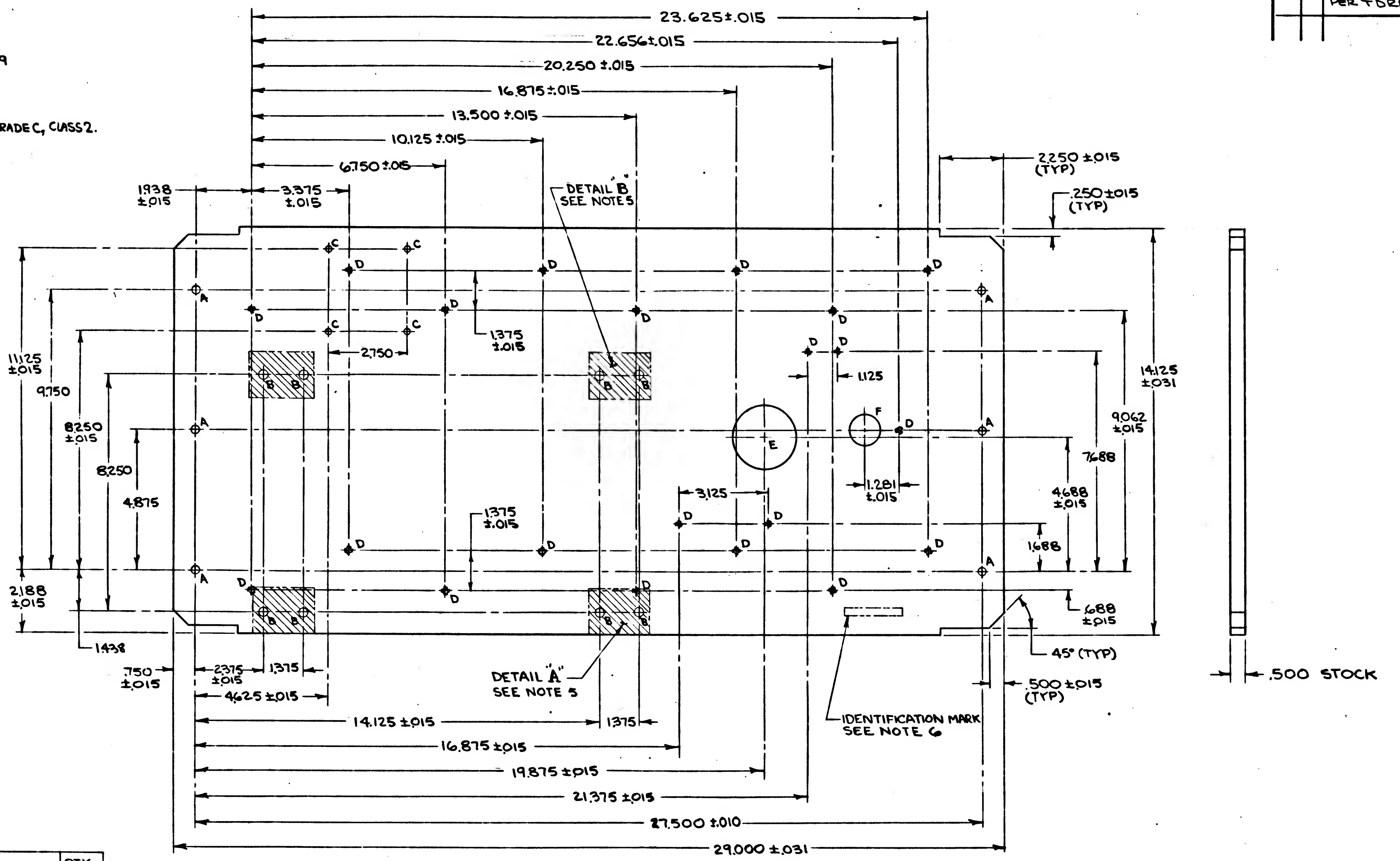
TITLE CRADLE

CODE IDENT NO. 89944
SIZE D
NASA NUMBER 1022393
SCALE 1/1
WEIGHT
CALC ACTUAL
SHEET 1 OF 1

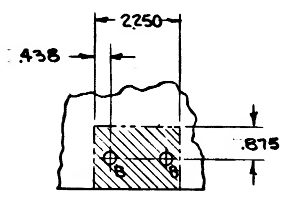
REVISIONS				
SYM	ZONE	DESCRIPTION	DATE	APPROVAL
	–	CLASS A RELEASE PER TDRR 21728		

NOTES:-

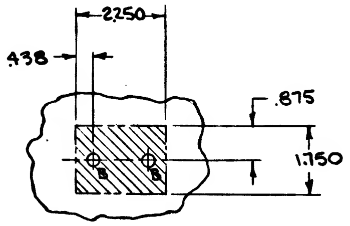
1-INTERPRET DWG PER MIL-D-70327
2-GENERAL MACHINING STANDARDS PER ND1002078
3-REMOVE BURRS PER ND1002079
4-FININSH 125√ ON MACHINED SURFACES
5-FINISH:
  A-CHEMICAL FILM PER MIL-C-5541 GRADE C, CLASS 2.
  B-APPLY ONE COAT OF ZINC CHROMATE PRIMER PER MIL-P-8585 AND TWO COATS OF CASHMERE BLUE ENAMEL PER NASA DWG NO. 1016194 TO ALL SURFACES EXCEPT HOLES A,B,C, D AND 4 SHADED AREAS ON NEAR SIDE SHOWN.
6-IDENTIFY USING NASA DWG NO., REV LETTER AND MANUFACTURERS SYMBOL PER ND1002019.



HOLE	DESCRIPTION	QTY
A	DR 5/16 (.312) THRU	6
B	DR 11/32 (.343) THRU	8
C	DR 7/32 (.218) THRU	4
D	DR NO. 24 (.152) THRU NO. 10-24 NC-2B THRU	21
E	2.250 DIA THRU	1
F	1.062 DIA CBORE × .125 DEEP	1



DETAIL "A"
TYP 2 PLACES



DETAIL "B"
TYP 2 PLACES

MASTER

ITEM NO.	QTY REQD	SYM	GOVERNMENT/NASA NO.	KOLLSMAN PART NO.	CODE IDENT	NOMENCLATURE OR DESCRIPTION	MATERIAL	SPECIFICATION	UNIT WT

LIST OF PARTS AND MATERIALS

1019957	1019977	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOL ON: FRACTIONS ± ~; DECIMALS ± .005; ANGLES ± 2° DO NOT SCALE THIS DRAWING	KOLLSMAN INSTRUMENT CORPORATION ELMHURST NEW YORK KIC PN 0338691136A
NEXT ASSY	USED ON	MATERIAL ALUM ALLOY 2024-T4 FED SPEC QQ-A-250/4 TEMPER T4	DRAWN H.E. BOLD DATE 5-6-65 CHECKED S. Sam 6-1-65 APPROVAL Wilson 6-6-65 APPROVAL
APPLICATION		CONTRACT NAS 9-497	NASA APPROVAL MIT APPROVAL

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

TITLE
PLATE, SUPPORT

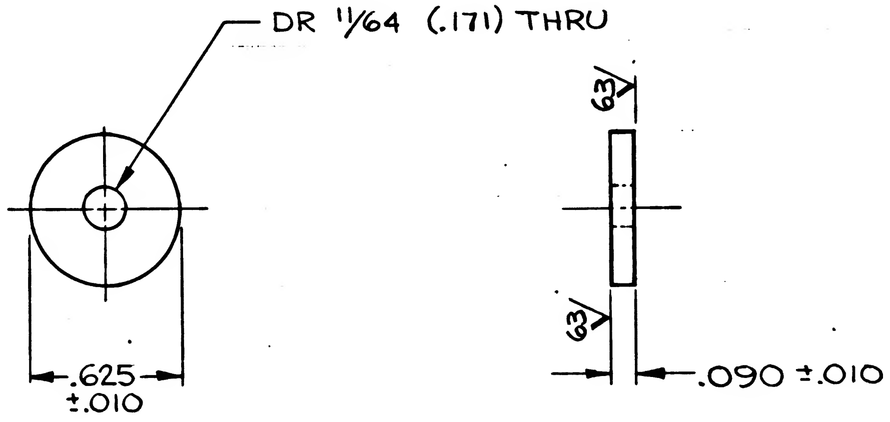
CODE IDENT NO.	SIZE	NASA NUMBER
89944	D	1022394
SCALE 1/2	WEIGHT CALC ACTUAL	SHEET 1 OF 1

REVISIONS 20458

SYM	ZONE	DESCRIPTION	DATE	APPROVAL

NOTES:

1. INTERPRET DWG PER MIL-D-70327.
2. GENERAL MACHINING STANDARDS PER ND1002078.
3. REMOVE BURRS PER ND1002079
4. FINISH 125/ UNLESS OTHERWISE SPECIFIED.
5. PASSIVATE PER MIL-STD-171, FINISH NO. 5.4.1.
6. IDENTIFY USING NASA DWG NO REVISION LETTER AND MANUFACTURERS SYMBOL PER ND1002019 (BAGGED OR TAGGED)



MASTER

ITEM NO.	QTY REQD	SYM	GOVERNMENT/NASA NO.	KOLLSMAN PART NO.	CODE IDENT	NOMENCLATURE OR DESCRIPTION	MATERIAL	SPECIFICATION	UNIT WT

LIST OF PARTS AND MATERIALS

NEXT ASSY	USED ON
1022824	1019962

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES

TOL ON	FRACTIONS	DECIMALS	ANGLES
	± ~	± .005	± ~

DO NOT SCALE THIS DRAWING

MATERIAL CRES AISI NO. 303
FED. SPEC: QQ-S-763 CLASS 303 COND A
CONTRACT

KOLLSMAN INSTRUMENT CORPORATION
ELMHURST NEW YORK
KIC PN 03386911210

DRAWN V.P. Demas DATE 5/3/65
CHECKED B. Kozlowski 5/3/65
APPROVAL
APPROVAL
NASA APPROVAL
MIT APPROVAL

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

TITLE
WASHER, STOP

CODE IDENT NO.	SIZE	NASA NUMBER
89944	C	1022414

SCALE 2/1 WEIGHT CALC ACTUAL SHEET 1 OF 1

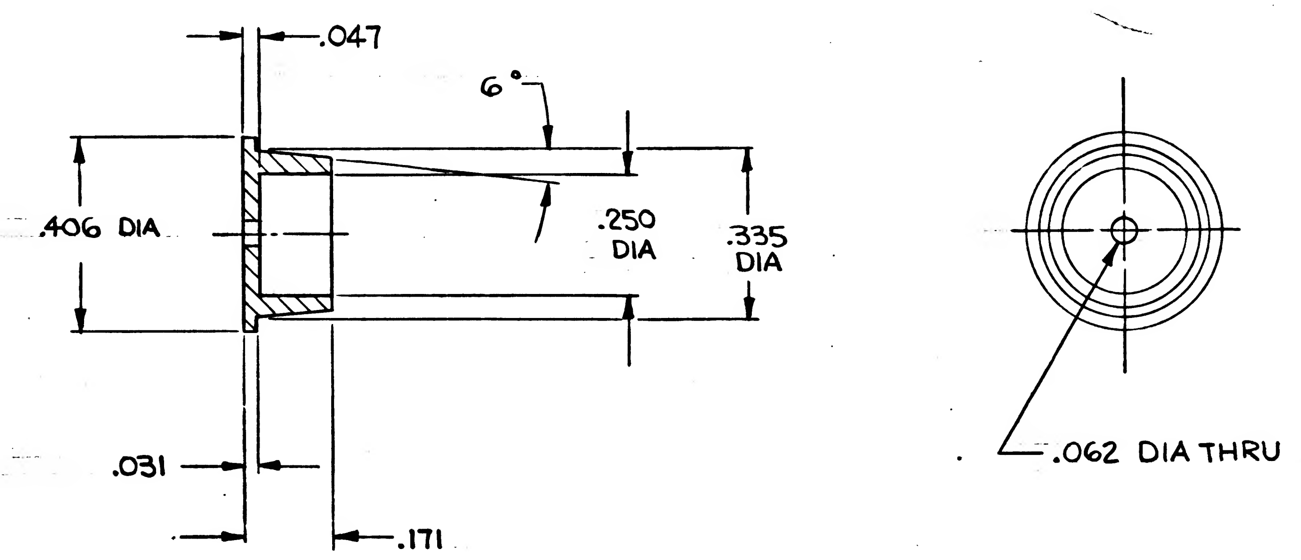
AD-1340

REVISIONS 20503 6/28/65

SYM	ZONE	DESCRIPTION	DATE	APPROVAL

NOTES:

1. INTERPRET DWG PER MIL-D-70327.
2. GENERAL MACHINING STANDARDS PER ND1002078.
3. MATERIAL POLYETHYLENE, COLOR RED, PER FED-SPEC L-P-390 TYPE I CLASS L GRADE 2
4. IDENTIFY USING NASA DRAWING NO., REVISION LETTER AND MANUFACTURER'S SYMBOL PER ND1002019 (BAGGED).



MASTER

ITEM NO.	QTY REQD	SYM	GOVERNMENT/NASA NO.	KOLLSMAN PART NO.	CODE IDENT	NOMENCLATURE OR DESCRIPTION	MATERIAL	SPECIFICATION	UNIT WT

LIST OF PARTS AND MATERIALS

NEXT ASSY	USED ON
1022893	1019984

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES

TOL ON	FRACTIONS	DECIMALS	ANGLES
	± ~	±.005	± 1°

DO NOT SCALE THIS DRAWING
MATERIAL SEE NOTE 3
CONTRACT

KOLLSMAN INSTRUMENT CORPORATION
ELMHURST NEW YORK
KIC PN 03386911391
DRAWN J.P. DEMAS DATE 5-18-65
CHECKED N. Ketzler 6-14-65
APPROVAL 6-16-65
APPROVAL
NASA APPROVAL 6-16-65
MIT APPROVAL 6-28-65

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

TITLE
PLUG, CAP

CODE IDENT NO. 89944
SIZE C
NASA NUMBER 1022430
SCALE 4:1
WEIGHT CALC ACTUAL
SHEET 1 OF 1

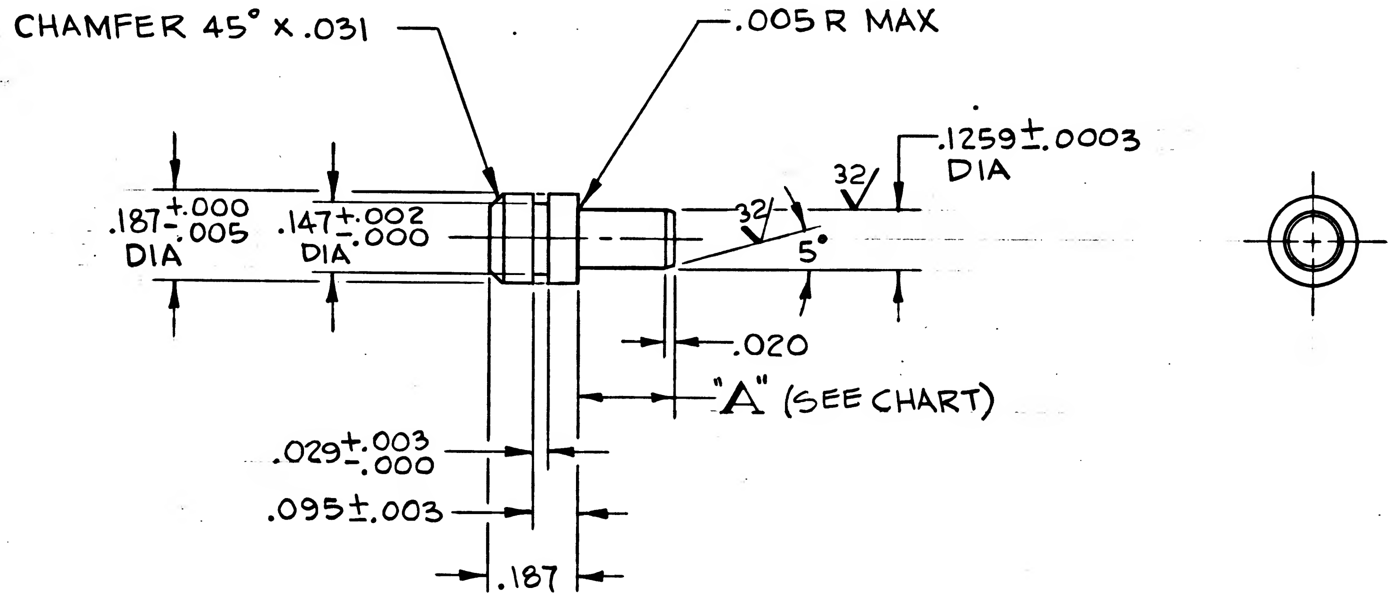
AD-1340

WA 1022430

REVISIONS 21721				
SYM	ZONE	DESCRIPTION	DATE	APPROVAL
—	—	CLASS A RELEASE PER TDRR		

NOTES:

1. INTERPRET DWG PER MIL-D-70327.
2. GENERAL MACHINING STANDARDS PER ND1002078.
3. REMOVE BURRS PER ND 1002079.
4. FINISH $\overset{125}{\checkmark}$ UNLESS OTHERWISE SPECIFIED.
5. PASSIVATE PER MIL-STD-171, FINISH NO. 5.4.1.
6. IDENTIFY USING NASA DWG NO., REVISION LETTER AND MANUFACTURER'S SYMBOL PER ND1002019 (BAGGED OR TAGGED).



DIM. "A"	NASA NO.
.140 +.010 −.000	1022439-001
.203 +.010 −.000	1022439-002

ITEM NO.	QTY REQD	SYM	GOVERNMENT/NASA NO.	KOLLSMAN PART NO.	CODE IDENT	NOMENCLATURE OR DESCRIPTION	MATERIAL	SPECIFICATION	UNIT WT

LIST OF PARTS AND MATERIALS

NEXT ASSY	USED ON
1022919	1019977
1022918	1019977

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOL ON FRACTIONS ± — DECIMALS ±.005 ANGLES ± 1°
DO NOT SCALE THIS DRAWING
MATERIAL ST STL AISI 303
FED. SPEC-QQ-S-763
CLASS 303 COND A
CONTRACT NAS 9-497

KOLLSMAN INSTRUMENT CORPORATION
ELMHURST NEW YORK
KIC PN 03386911436 THRU 1437
DRAWN AJ PERALTA DATE 5-25-65
CHECKED L. Prescott 6-9-65
APPROVAL [illegible] 9-61
APPROVAL
NASA APPROVAL G. C. [illegible] G. [illegible] 6/17/65
MIT APPROVAL W. [illegible] 6/65

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

TITLE STUD

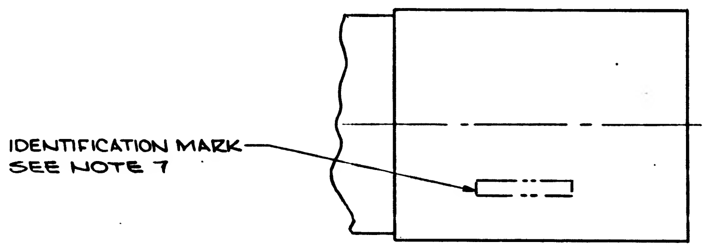
CODE IDENT NO. 89944
SIZE C
NASA NUMBER 1022439
SCALE 4/1
WEIGHT CALC ACTUAL
SHEET 1 OF 1

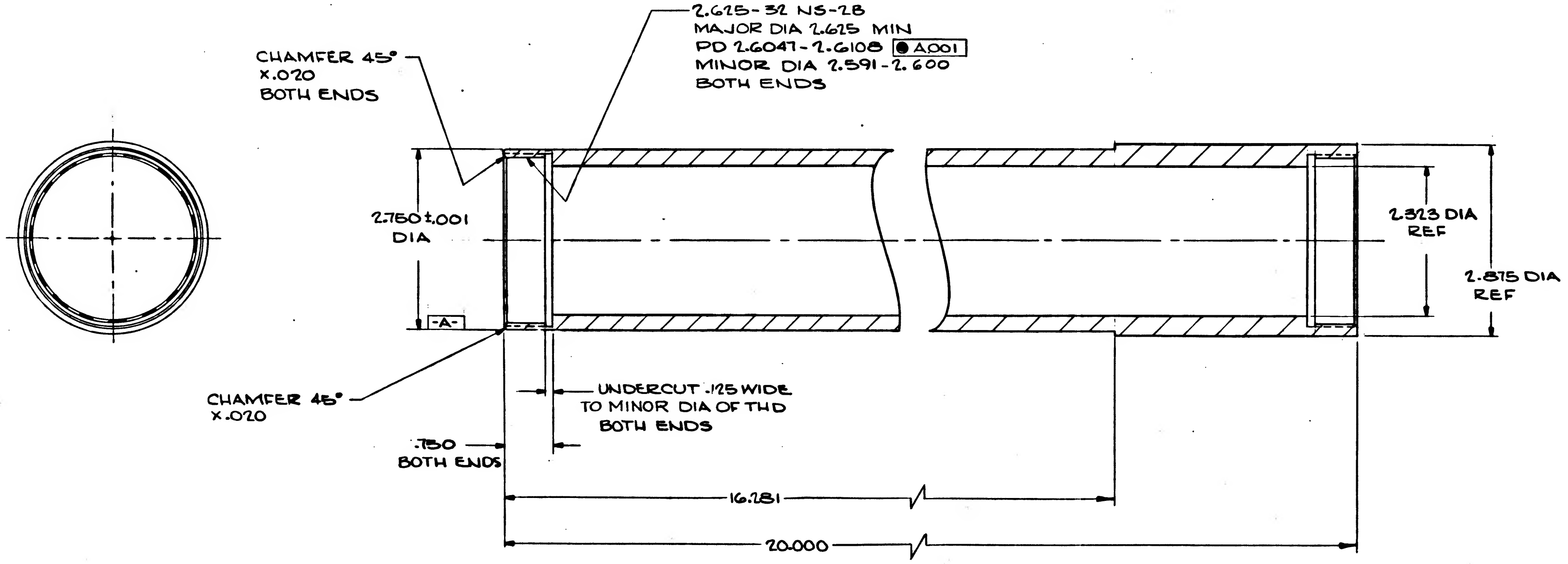
AD-1340

MASTER

NOTES:
1. INTERPRET DWG PER MIL-D-70327
2. GENERAL MACHINING STANDARDS PER ND1002078
3. REMOVE BURRS PER ND1002079
4. FINISH $^{63}\surd$ UNLESS OTHERWISE SPECIFIED
5. PASSIVATE PER MIL-STD-171, FINISH NO. 5.4.1.
6. APPLY ZINC CHROMATE PRIMER PER MIL-P-8585 AND APPLY LUSTERLESS ENAMEL PER TT-E-527 COLOR NO. 37038 OF FED STD NO 595 ON ALL INTERNAL SURFACES EXCEPT THREADS
7. IDENTIFY USING NASA DRAWING NO., REVISION LETTER AND MANUFACTURERS SYMBOL PER ND1002019.

REVISIONS 21722				
SYM	ZONE	DESCRIPTION	DATE	APPROVAL
—	—	CLASS A REVISION PER TDRR 21722		





ITEM NO.	QTY REQD	SYM	GOVERNMENT/NASA NO.	KOLLSMAN PART NO.	CODE IDENT	NOMENCLATURE OR DESCRIPTION	MATERIAL	SPECIFICATION	UNIT WT

LIST OF PARTS AND MATERIALS

NEXT ASSY	USED ON
1022836	1019977

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES

TOL ON	FRACTIONS	DECIMALS	ANGLES
	± —	±.015	± 2°

DO NOT SCALE THIS DRAWING
MATERIAL ST. ST. SEAMLESS PIPE TYPE 304 2.875 O.D. x .276 WALL PER MIL-P-1144
CONTRACT NAS9-497

KOLLSMAN INSTRUMENT CORPORATION
ELMHURST NEW YORK
KIC PN 03386910170
DRAWN K. Smith DATE 4-5-65
CHECKED 4-7-65
APPROVAL 4-16-65
APPROVAL
NASA APPROVAL
MIT APPROVAL

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

TITLE
TUBE, OPTICAL

CODE IDENT NO. 89944
SIZE D
NASA NUMBER 1022448
SCALE 1/1
WEIGHT CALC ACTUAL
SHEET 1 OF 1

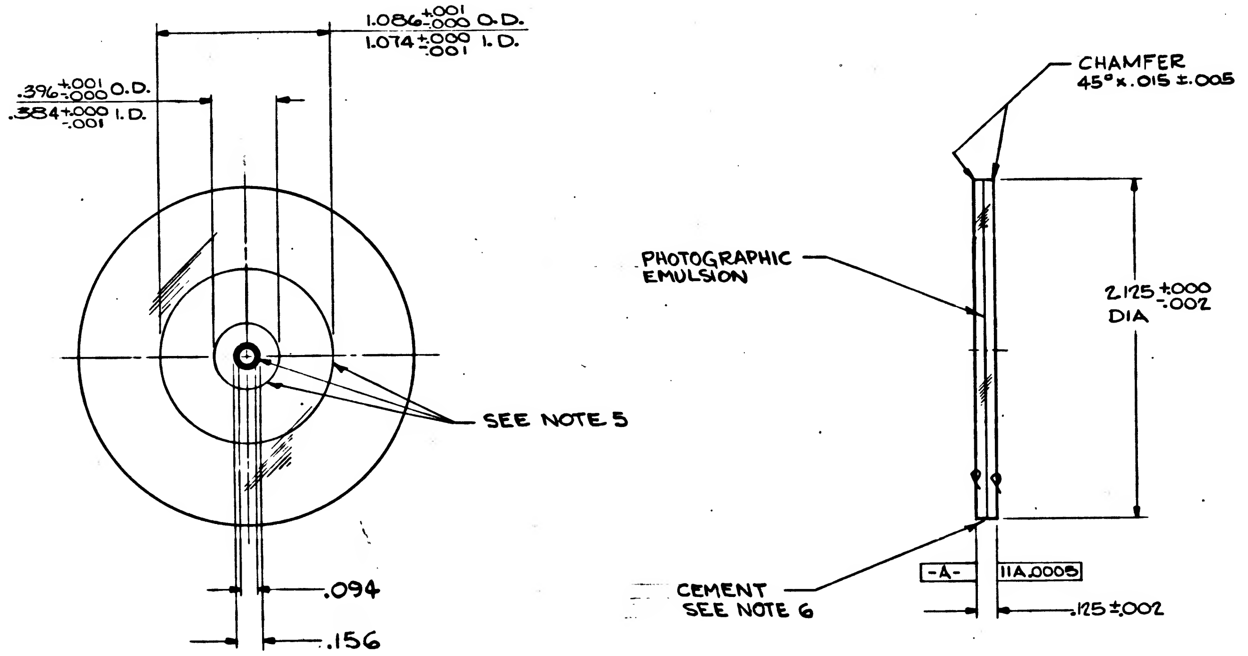
MASTER

MASTER

AD-1360

REVISIONS 21722				
SYM	ZONE	DESCRIPTION	DATE	APPROVAL
—	—	CLASS A REVISION PER TDRR 21722		

NOTES:
1. INTERPRET DWG IN ACCORDANCE WITH MIL-D-70327
2. ELEMENT IN ACCORDANCE WITH SPEC MIL-O-13830
3. GLASS TO BE IN ACCORDANCE WITH SPEC MIL-G-16592, GRADE A
4. SURFACES MARKED "P" POLISHED
5. RETICLE TO BE BLACK OPAQUE PHOTOGRAPHIC EMULSION ON GLASS. PATTERN TO BE CONCENTRIC WITH 2.125 DIA WITHIN .001 TIR.
6. CEMENT IN ACCORDANCE WITH MIL-A-003920
7. IDENTIFY USING NASA DRAWING NUMBER, REVISION LETTER AND MANUFACTURERS SYMBOL PER ND 1002019 (BAGGED)



MASTER

ITEM NO.	QTY REQD	SYM	GOVERNMENT/NASA NO.	KOLLSMAN PART NO.	CODE IDENT	NOMENCLATURE OR DESCRIPTION	MATERIAL	SPECIFICATION	UNIT WT

LIST OF PARTS AND MATERIALS

NEXT ASSY	USED ON
1022836	1019977

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES

TOL ON	FRACTIONS	DECIMALS	ANGLES
	± —	±.005	± —

DO NOT SCALE THIS DRAWING

MATERIAL
SEE NOTE 3

CONTRACT
NAS9-497

KOLLSMAN INSTRUMENT CORPORATION
ELMHURST NEW YORK
KIC PN 03386910172

DRAWN K. Smith DATE 4-5-65
CHECKED 4-7-65
APPROVAL
APPROVAL
NASA APPROVAL
MIT APPROVAL

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

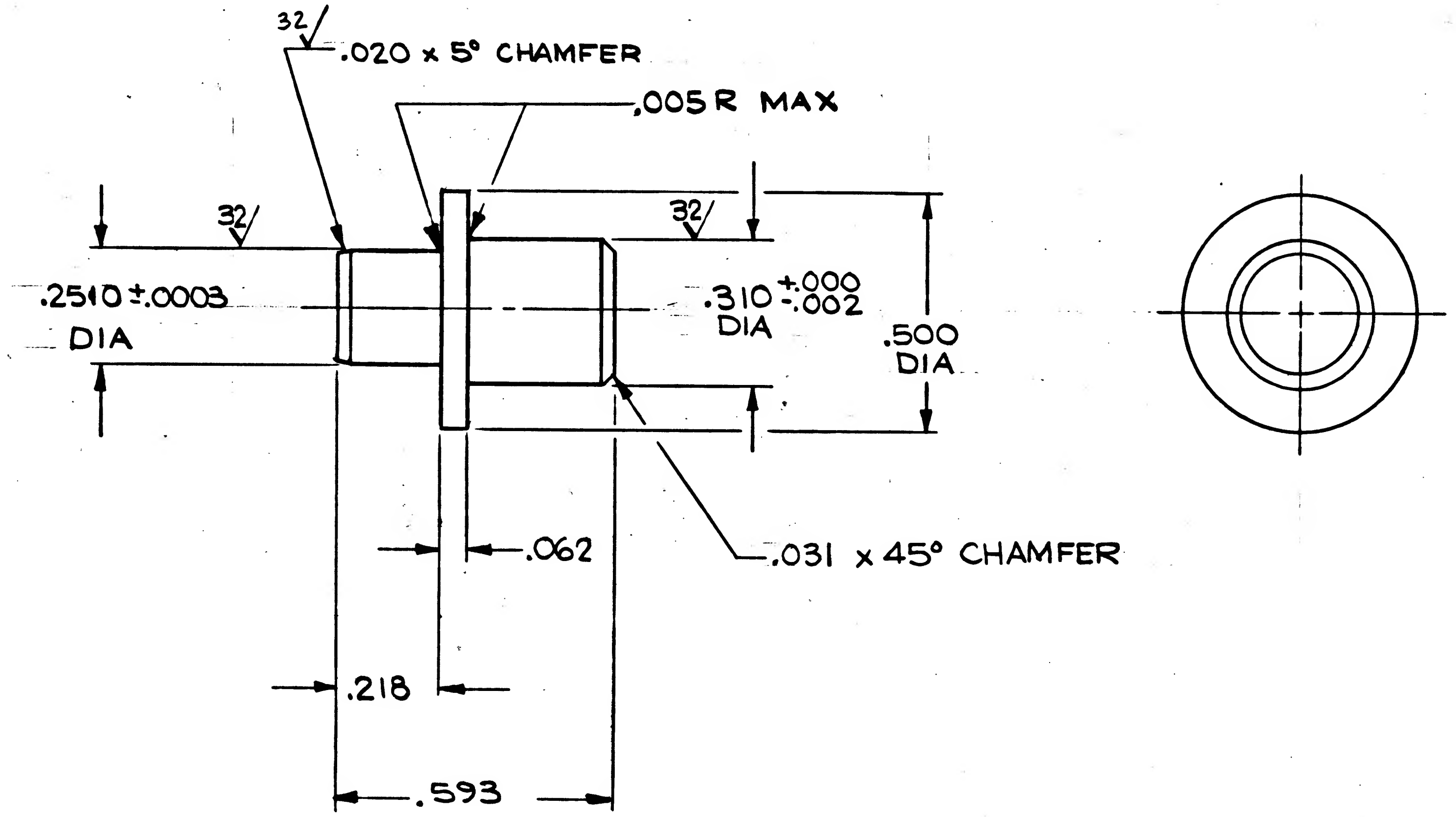
TITLE
RETICLE, TARGET

CODE IDENT NO. 89944
SIZE D
NASA NUMBER 1022450
SCALE 1/1
WEIGHT
CALC ACTUAL
SHEET 1 OF 1

AD-1380

REVISIONS 21721				
SYM	ZONE	DESCRIPTION	DATE	APPROVAL
–	–	CLASS A RELEASE PER TDRR		

NOTES:
1. INTERPRET DWG PER MIL-D-70327.
2. GENERAL MACHINING STANDARDS PER ND1002078.
3. REMOVE BURRS PER ND1002079.
4. FINISH 125√ UNLESS OTHERWISE SPECIFIED.
5. PASSIVATE PER MIL-STD-171, FINISH NO. 5.4.1.
6. IDENTIFY USING NASA DRAWING NUMBER, REVISION LETTER AND MANUFACTURERS SYMBOL PER ND1002019 (BAGGED OR TAGGED).



ITEM NO.	QTY REQD	SYM	GOVERNMENT/NASA NO.	KOLLSMAN PART NO.	CODE IDENT	NOMENCLATURE OR DESCRIPTION	MATERIAL	SPECIFICATION	UNIT WT

LIST OF PARTS AND MATERIALS

NEXT ASSY	USED ON
1022917	1019977

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES

TOL ON	FRACTIONS	DECIMALS	ANGLES
	± N	± .005	± 1°

DO NOT SCALE THIS DRAWING
MATERIAL STAINLESS STEEL AISI NO. 303
FED. SPEC: QQ-S-763 CLASS 303 COND A
CONTRACT NAS 9-497

KOLLSMAN INSTRUMENT CORPORATION
ELMHURST NEW YORK
KIC PN 03386911442
DRAWN J. P. Demas DATE 5-25-65
CHECKED L. Russell 6-9-65
APPROVAL 9-65
APPROVAL
NASA APPROVAL A. C. Metz 6/17/65
MIT APPROVAL 12 Aug 65

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

TITLE PIN, PIVOT

CODE IDENT NO. 89944
SIZE C
NASA NUMBER 1022455
SCALE 4/1
WEIGHT CALC ACTUAL
SHEET 1 OF 1

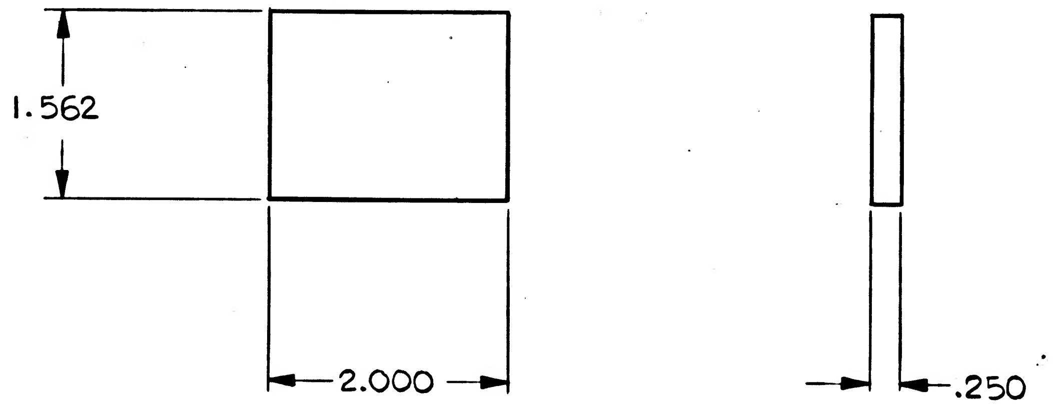
AD-1340

MASTER
MASTER

NOTES:
1-INTERPRET DWG PER MIL-D-70327
2-MATERIAL: POLYURETHANE FOAM, COLOR GRAY, DENSITY 4 LBS PER CU FT PER MIL-P-26514, TYPE I, CLASS 2.
3-IDENTIFY USING NASA DRAWING NO., REVISION LETTER AND MANUFACTURER'S SYMBOL PER ND1002019 BAGGED OR TAGGED

REVISIONS 20503 6/28/65

SYM	ZONE	DESCRIPTION	DATE	APPROVAL



ITEM NO.	QTY REQD	SYM	GOVERNMENT/NASA NO.	KOLLSMAN PART NO.	CODE IDENT	NOMENCLATURE OR DESCRIPTION	MATERIAL	SPECIFICATION	UNIT WT

LIST OF PARTS AND MATERIALS

NEXT ASSY	USED ON
1022879	1019984

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES

TOL ON	FRACTIONS	DECIMALS	ANGLES
	± —	±.062	± —

DO NOT SCALE THIS DRAWING
MATERIAL SEE NOTE 2
CONTRACT

KOLLSMAN INSTRUMENT CORPORATION
ELMHURST NEW YORK
KIC PN 03386911554
DRAWN A.S.Andolfi DATE 6-12-65
CHECKED N. Ketzler 6-14-65
APPROVAL 6 15 65
APPROVAL
NASA APPROVAL A. C. 6-16-65
MIT APPROVAL 6-26-65

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

TITLE
FILLER

CODE IDENT NO. 89944
SIZE C
NASA NUMBER 1022487
SCALE 1/1
WEIGHT CALC ACTUAL
SHEET 1 OF 1

MASTER

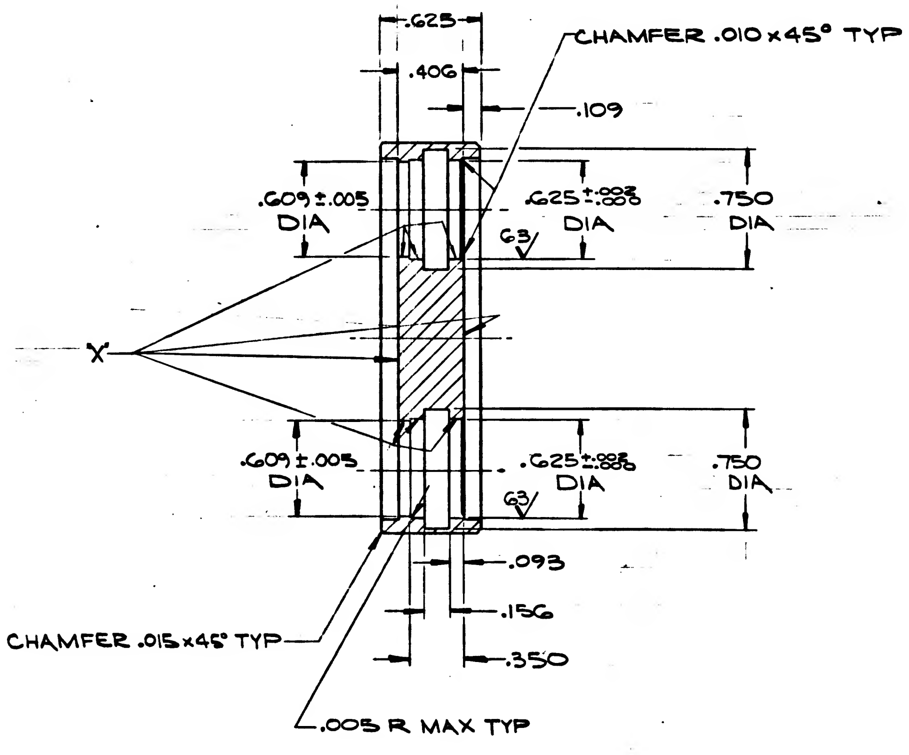
1022487

wA 1022487

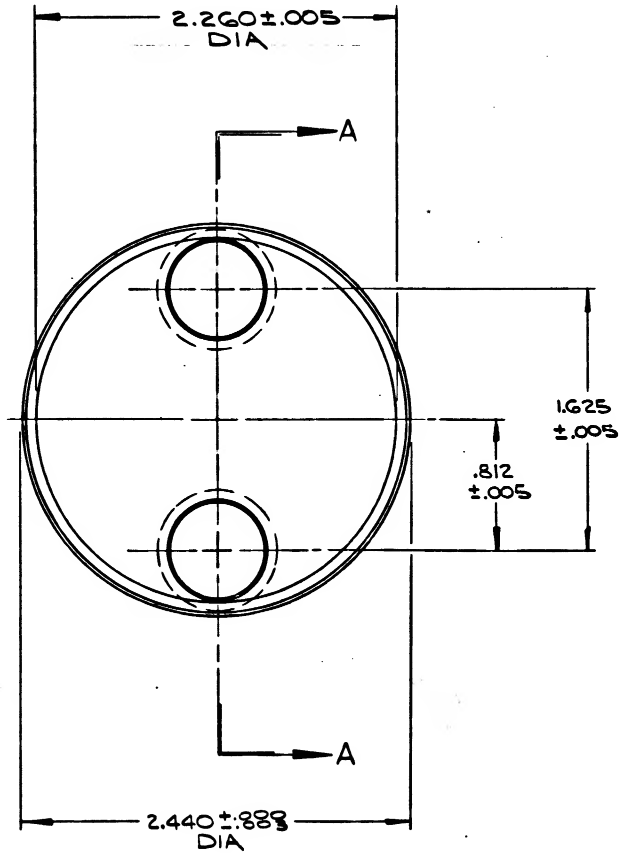
AD-1340

REVISIONS 20/71				
SYM	ZONE	DESCRIPTION	DATE	APPROVAL

NOTES:
1-INTERPRET DWG PER MIL-D-70327
2-GENERAL MACHINING STANDARDS PER ND 1002078
3-REMOVE BURRS PER ND 1002079
4-FINISH 125/ UNLESS OTHERWISE SPECIFIED
5-SURFACES MARKED "X" APPLY ZINC CHROMATE PRIMER PER MIL-P-8585, APPLY LUSTERLESS ENAMEL PER TT-E-527 COLOR NO. 37038 OF FED STD NO 595
6-INDENTIFY USING NASA DWG NO, REVISION LETTER AND MANUFACTURERS' SYMBOL PER ND 1002019 (BAG OR TAG)
7-ANODIZE PER MIL-A-8625 TYPE II (BLACK)



SECTION A-A



MASTER

ITEM NO.	QTY REQD	SYM	GOVERNMENT/NASA NO.	KOLLSMAN PART NO.	CODE IDENT	NOMENCLATURE OR DESCRIPTION	MATERIAL	SPECIFICATION	UNIT WT

LIST OF PARTS AND MATERIALS

NEXT ASSY	USED ON
1022941	1019970

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES

TOL ON	FRACTIONS	DECIMALS	ANGLES
	± ~	± .010	± 2°

DO NOT SCALE THIS DRAWING
MATERIAL ALUMINUM ALLOY 2024-T3
FED SPEC QQ-A-250/4 TEMPER T3
CONTRACT

KOLLSMAN INSTRUMENT CORPORATION
ELMHURST NEW YORK
KIC PN 03386911321
DRAWN Rindzuner DATE 6/14/65
CHECKED [illegible] 6-14-65
APPROVAL [illegible] 6-14-65
APPROVAL
NASA APPROVAL [illegible] 6/15/65
[illegible] 6-14-65
MIT APPROVAL M G Hurley 6-15-65

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

TITLE
ADAPTER, FILTER
PHOTOMETER

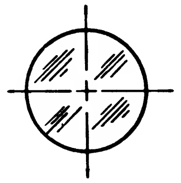
CODE IDENT NO.
SIZE D
NASA NUMBER 1022488
SCALE 2/1
WEIGHT
CALC ACTUAL
SHEET 1 OF 1

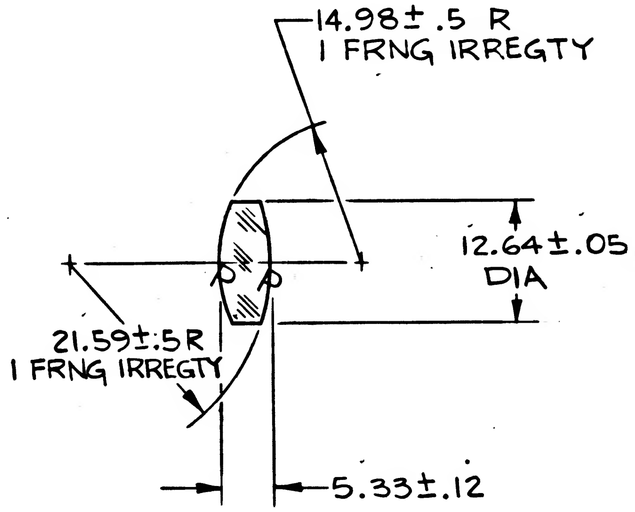
AD-1360

REVISIONS 21729				
SYM	ZONE	DESCRIPTION	DATE	APPROVAL

NOTES:

1. INTERPRET DWG PER MIL-D-70327.
2a ELEM IN ACCORD. W/SPEC MIL-O-13830.
b. CA : ENT 10.69 MM , EXIT 10.69 MM
c. SURF. QUAL : 60- 40
d CTRG ERROR : 5 MINUTES
3. CHAM .25±.10 x 45° ALL EDGES.
4. SURF. MARKED "P" POL , ALL OTHERS GRD
5. NO INTERFERENCE FRINGE MEASUREMENT REQD
6. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED.
7. IDENTIFY USING NASA DWG NO., REVISION LETTER AND MANUFACTURER'S SYMBOL PER ND 1002019 (BAGGED).





MASTER

MASTER

ITEM NO.	QTY REQD	SYM	GOVERNMENT/NASA NO.	KOLLSMAN PART NO.	CODE IDENT	NOMENCLATURE OR DESCRIPTION	MATERIAL	SPECIFICATION	UNIT WT

LIST OF PARTS AND MATERIALS

NEXT ASSY	USED ON
1019900	1019900

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN [redacted] MM
TOL ON: FRACTIONS ± — ; DECIMALS ± — ; ANGLES ± 1°
DO NOT SCALE THIS DRAWING
MATERIAL GLASS, OPTICAL, BOROSILICATE CROWN BSC-2, TYPE 517-645, GR C PER MIL-G-174
CONTRACT NAS 9-497

KOLLSMAN INSTRUMENT CORPORATION
ELMHURST NEW YORK
KIC PN 03386911760
DRAWN AJ PERALTA DATE 7-6-65
CHECKED B. Koglowski 7-6-65
APPROVAL 7-6-65
APPROVAL
NASA APPROVAL
MIT APPROVAL

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

TITLE LENS

CODE IDENT NO. 89944
SIZE C
NASA NUMBER 1022515
SCALE 2:1
WEIGHT CALC ACTUAL
SHEET 1 OF 1

AD-1340

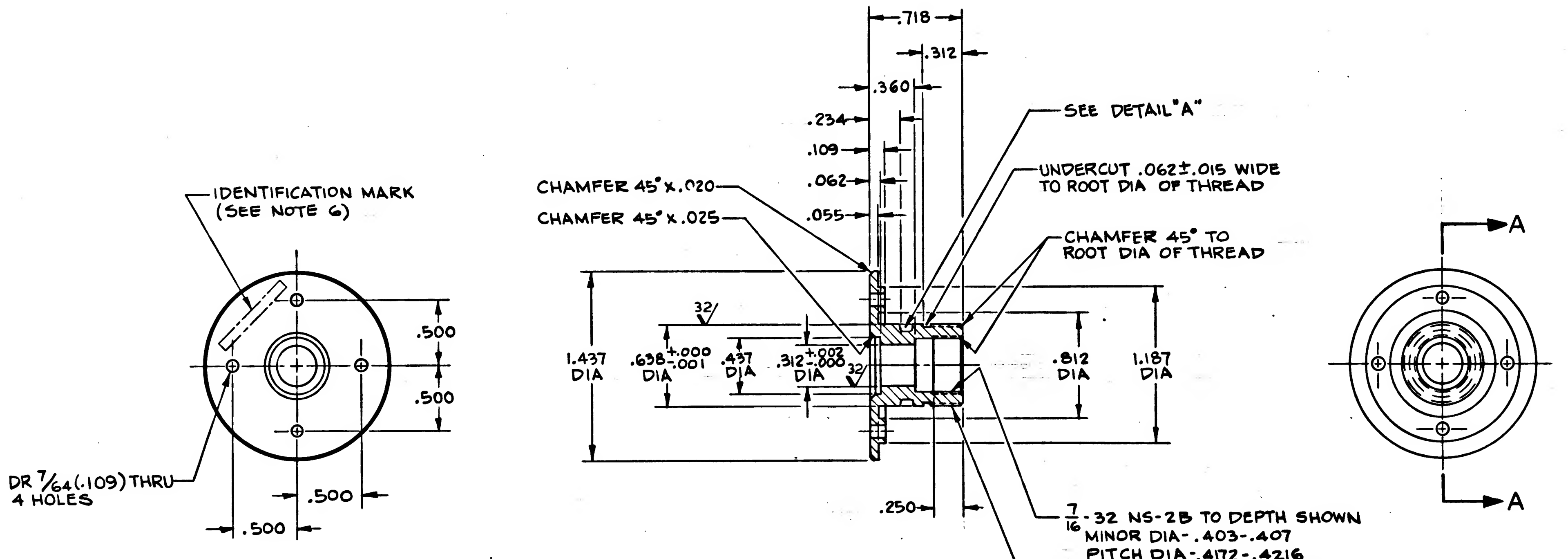
1022515

1022515

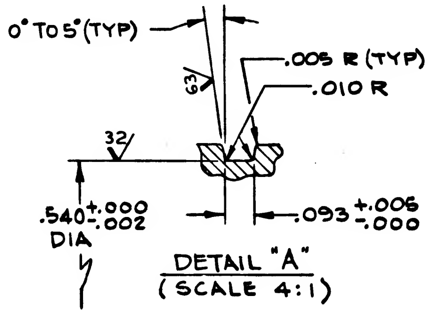
NOTES:

1. INTERPRET DWG PER MIL-D-70327.
2. GENERAL MACHINING STANDARDS PER ND1002078.
3. REMOVE BURRS PER ND1002079.
4. FINISH $\sqrt[125]{}$ UNLESS OTHERWISE SPECIFIED.
5. PASSIVATE PER MIL-STD-171, FINISH NO. 5.4.1.
6. IDENTIFY USING NASA DWG NO., REVISION NO. AND MANUFACTURER'S SYMBOL PER ND 1002019.

REVISIONS 3061				
SYM	ZONE	DESCRIPTION	DATE	APPROVAL
—	—	INITIAL RELEASE CLASS A PER TDRR		



SECTION A-A



DETAIL "A"
(SCALE 4:1)

MASTER

ITEM NO.	QTY REQD	SYM	GOVERNMENT/NASA NO.	KOLLSMAN PART NO.	CODE IDENT	NOMENCLATURE OR DESCRIPTION	MATERIAL	SPECIFICATION	UNIT WT

LIST OF PARTS AND MATERIALS

NEXT ASSY	USED ON
1022968	1022970
1022969	1022970

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOL ON: FRACTIONS ± ~ ; DECIMALS ±.005 ; ANGLES ± 1°
DO NOT SCALE THIS DRAWING
MATERIAL ST STL AISI 416
FED. SPEC-QQ-S-763 CLASS 416 COND A
CONTRACT NAS9-497

KOLLSMAN INSTRUMENT CORPORATION
ELMHURST NEW YORK
KIC PN 03386911810
DRAWN AJ PERALTA DATE 7-28-65
CHECKED 8-5-65
APPROVAL
APPROVAL
NOT REQUIRED PER LETTER
NASA APPROVAL PP/65-612
MIT APPROVAL

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

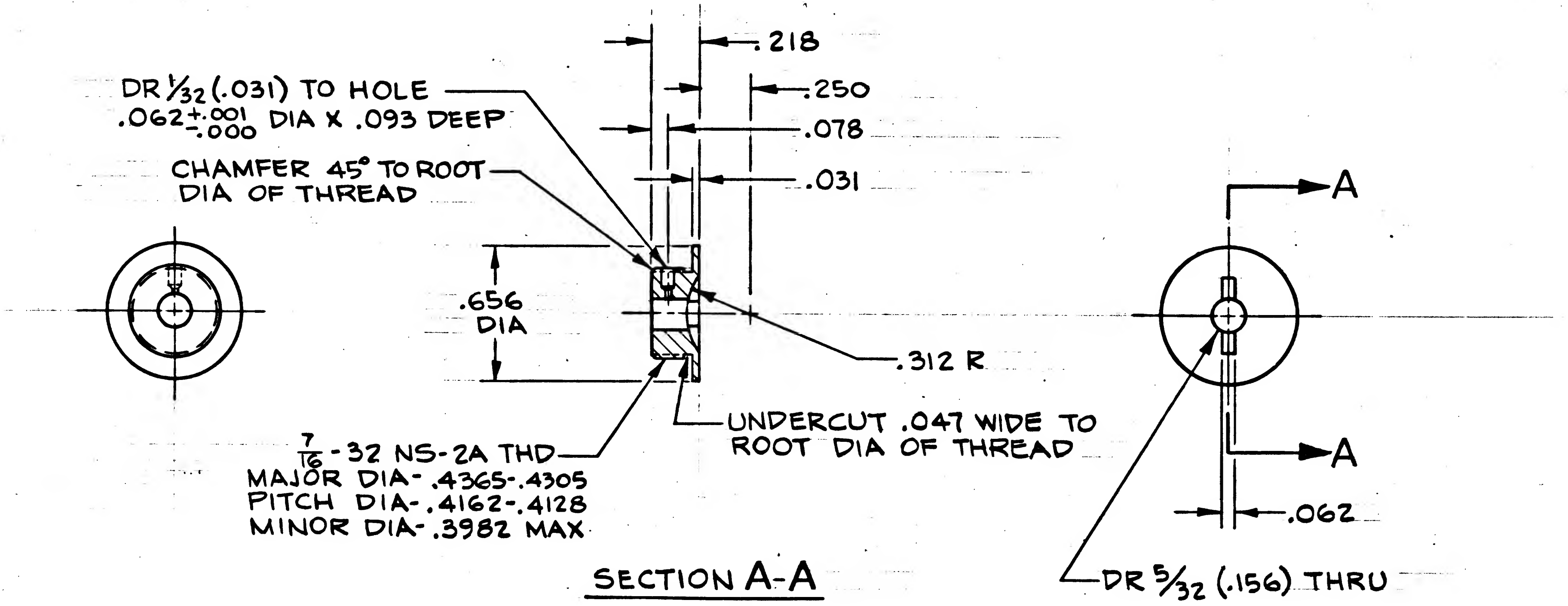
TITLE HOUSING, PLUNGER

CODE IDENT NO. 89944
SIZE D
NASA NUMBER 1022541
SCALE 2/1
WEIGHT CALC ACTUAL
SHEET 1 OF 1

REVISIONS				23061
SYM	ZONE	DESCRIPTION	DATE	APPROVAL
—	–	INITIAL RELEASE CLASS A PER TDRR		

NOTES:

1. INTERPRET DWG PER MIL-D-70327.
2. GENERAL MACHINING STANDARDS PER ND1002078.
3. REMOVE BURRS PER ND1002079.
4. FINISH 125√ UNLESS OTHERWISE SPECIFIED.
5. PASSIVATE PER MIL-STD-171, FINISH NO. 5.4.1.
6. IDENTIFY USING NASA DWG NO., REVISION LETTER AND MANUFACTURER'S SYMBOL PER ND1002019 (BAGGED OR TAGGED).


.218
.250
.078
.031
DR 1/32 (.031) TO HOLE
.062 +.001 -.000 DIA X .093 DEEP
CHAMFER 45° TO ROOT DIA OF THREAD
.656 DIA
.312 R
UNDERCUT .047 WIDE TO ROOT DIA OF THREAD
7/16 - 32 NS-2A THD
MAJOR DIA - .4365 - .4305
PITCH DIA - .4162 - .4128
MINOR DIA - .3982 MAX
A
A
.062
DR 5/32 (.156) THRU

SECTION A-A

MASTER

ITEM NO.	QTY REQD	SYM	GOVERNMENT/NASA NO.	KOLLSMAN PART NO.	CODE IDENT	NOMENCLATURE OR DESCRIPTION	MATERIAL	SPECIFICATION	UNIT WT

LIST OF PARTS AND MATERIALS

NEXT ASSY	USED ON
1022965	1022970

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOL ON: FRACTIONS ± — DECIMALS ±.005 ANGLES ± 1°
DO NOT SCALE THIS DRAWING
MATERIAL ST STL AISI 416
FED. SPEC- QQ-S-763 CLASS 416 COND A
CONTRACT NAS 9-497

KOLLSMAN INSTRUMENT CORPORATION
ELMHURST NEW YORK
KIC PN 03386911813
DRAWN AJ PERALTA DATE 7-29-65
CHECKED J Russell 8-5-65
APPROVAL 8-5-65
APPROVAL
NOT REQUIRED PER LETTER NASA-BB7-65-612
NASA APPROVAL G McKenzie 9/3/65
MIT APPROVAL 6-26-66

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

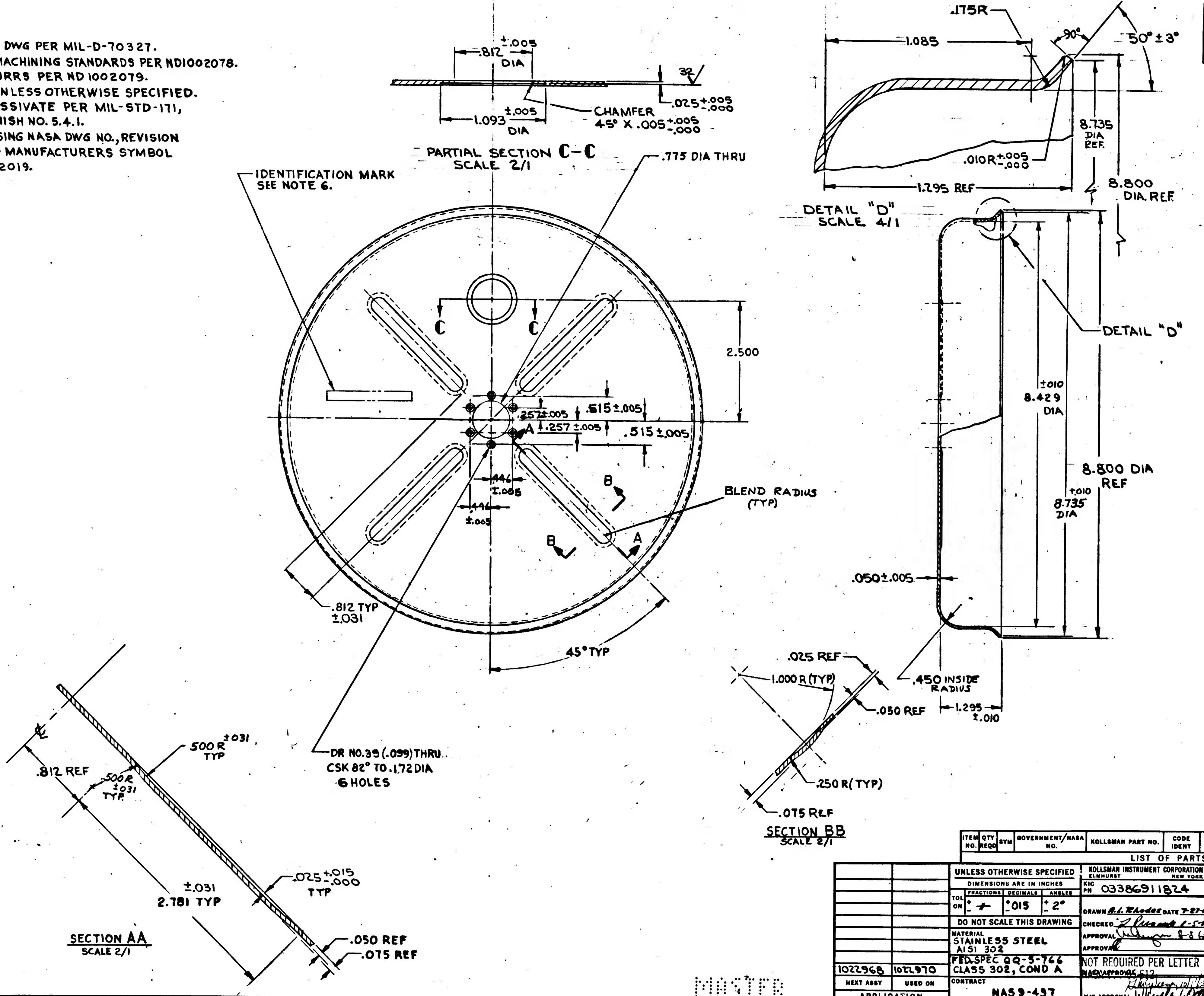
TITLE NUT

CODE IDENT NO. 89944
SIZE C
NASA NUMBER 1022544
SCALE 2/1
WEIGHT CALC ACTUAL
SHEET 1 OF 1

AD-1340

NOTES:
1. INTERPRET DWG PER MIL-D-70327.
2. GENERAL MACHINING STANDARDS PER ND1002078.
3. REMOVE BURRS PER ND 1002079.
4. FINISH 125√ UNLESS OTHERWISE SPECIFIED.
5. FINISH: PASSIVATE PER MIL-STD-171, FINISH NO. 5.4.1.
6. IDENTIFY USING NASA DWG NO., REVISION LETTER AND MANUFACTURERS SYMBOL PER ND1002019.

REVISIONS 23061				
SYM	ZONE	DESCRIPTION	DATE	APPROVAL
—	—	INITIAL RELEASE CLASS A PER TDRR		



ITEM NO.	QTY REQD	SYM	GOVERNMENT/NASA NO.	KOLLSMAN PART NO.	CODE IDENT	NOMENCLATURE OR DESCRIPTION	MATERIAL	SPECIFICATION	UNIT WT

LIST OF PARTS AND MATERIALS

1022968	1022970
NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOL ON: FRACTIONS ± — ; DECIMALS ±.015 ; ANGLES ± 2°
DO NOT SCALE THIS DRAWING
MATERIAL
STAINLESS STEEL
AISI 302
FED. SPEC QQ-S-766
CLASS 302, COND A
CONTRACT
NAS 9-497

KOLLSMAN INSTRUMENT CORPORATION
ELMHURST NEW YORK
KIC PN 03386911824
DRAWN A.L. Rhodes DATE 7-27-65
CHECKED [illegible] 8-5-65
APPROVAL [illegible] 8-5-65
APPROVAL
NOT REQUIRED PER LETTER
NASA APPROVAL 65-612
[illegible] 10/1/65
MIT APPROVAL [illegible]

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

TITLE
COVER, INSIDE

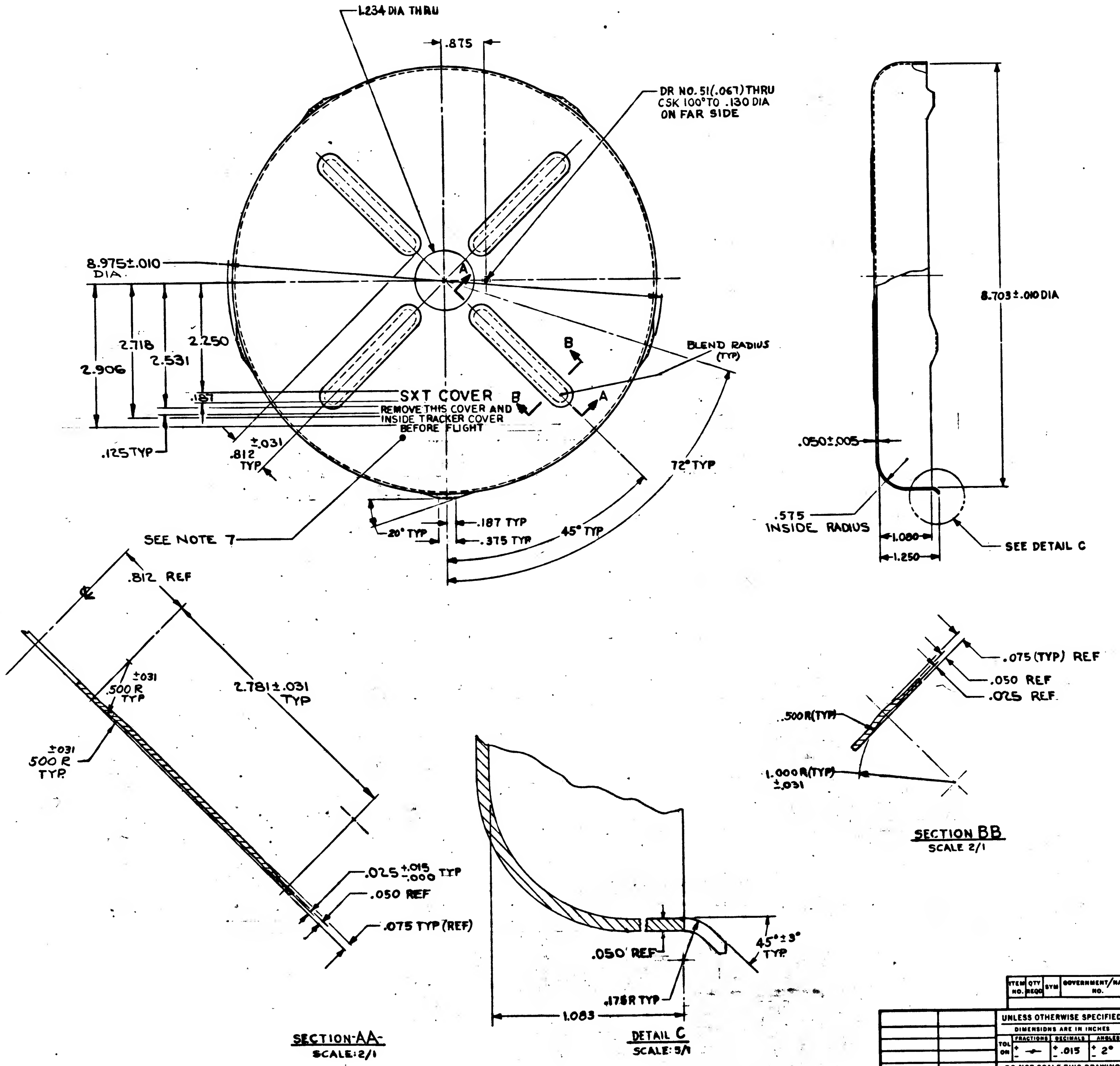
CODE IDENT NO. 89944
SIZE D
NASA NUMBER 1022552
SCALE 1/1
WEIGHT
CALC ACTUAL
SHEET 1 OF 1

MASTER

NOTES:
1-INTERPRET DWG PER MIL-D-70327.
2-GENERAL MACHINING STANDARDS PER ND1002078.
3-REMOVE BURRS PER ND1002079.
4-FINISH 125✓ UNLESS OTHERWISE SPECIFIED.
5-FINISH: PASSIVATE PER MIL-STD-171, FINISH NO. 5.4.1.
6-APPLY ZINC CHROMATE PRIMER PER MIL-P-8585 APPLY (2) TWO COATS YELLOW ENAMEL, PER TT-E-489 CLASS A, COLOR NO., 13655 OF FED. STD-595
7-SILK SCREEN CHARACTERS AS SHOWN X .031 THICK LINES USING BLACK ENAMEL PER ND1002112.
8-IDENTIFY USING NASA DRAWING NO., REVISION LETTER AND MANUFACTURER'S SYMBOL PER ND1002019 (BAGGED OR TAGGED).

REVISIONS 2306

SYM	ZONE	DESCRIPTION	DATE	APPROVAL
—	—	INITIAL RELEASE CLASS A PER TDRR		



MASTER

ITEM NO.	QTY REQD	SYM	GOVERNMENT/NASA NO.	KOLLSMAN PART NO.	CODE IDENT	NOMENCLATURE OR DESCRIPTION	MATERIAL	SPECIFICATION	UNIT WT

LIST OF PARTS AND MATERIALS

NEXT ASSY	USED ON
1022967	1022910

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOL ON: FRACTIONS ± —; DECIMALS ± .015; ANGLES ± 2°
DO NOT SCALE THIS DRAWING
MATERIAL
STAINLESS STEEL
AISI 302
FED SPEC QQ-S-766
CLASS 302, COND A
CONTRACT NAS 9-497

KOLLSMAN INSTRUMENT CORPORATION
ELMHURST NEW YORK
KIC PN 03386911827
DRAWN Al Rhodes DATE 7-30-65
CHECKED 6-5-65
APPROVAL
APPROVAL NOT REQUIRED PER LETTER NASA-PP7-65-612
MIT APPROVAL

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

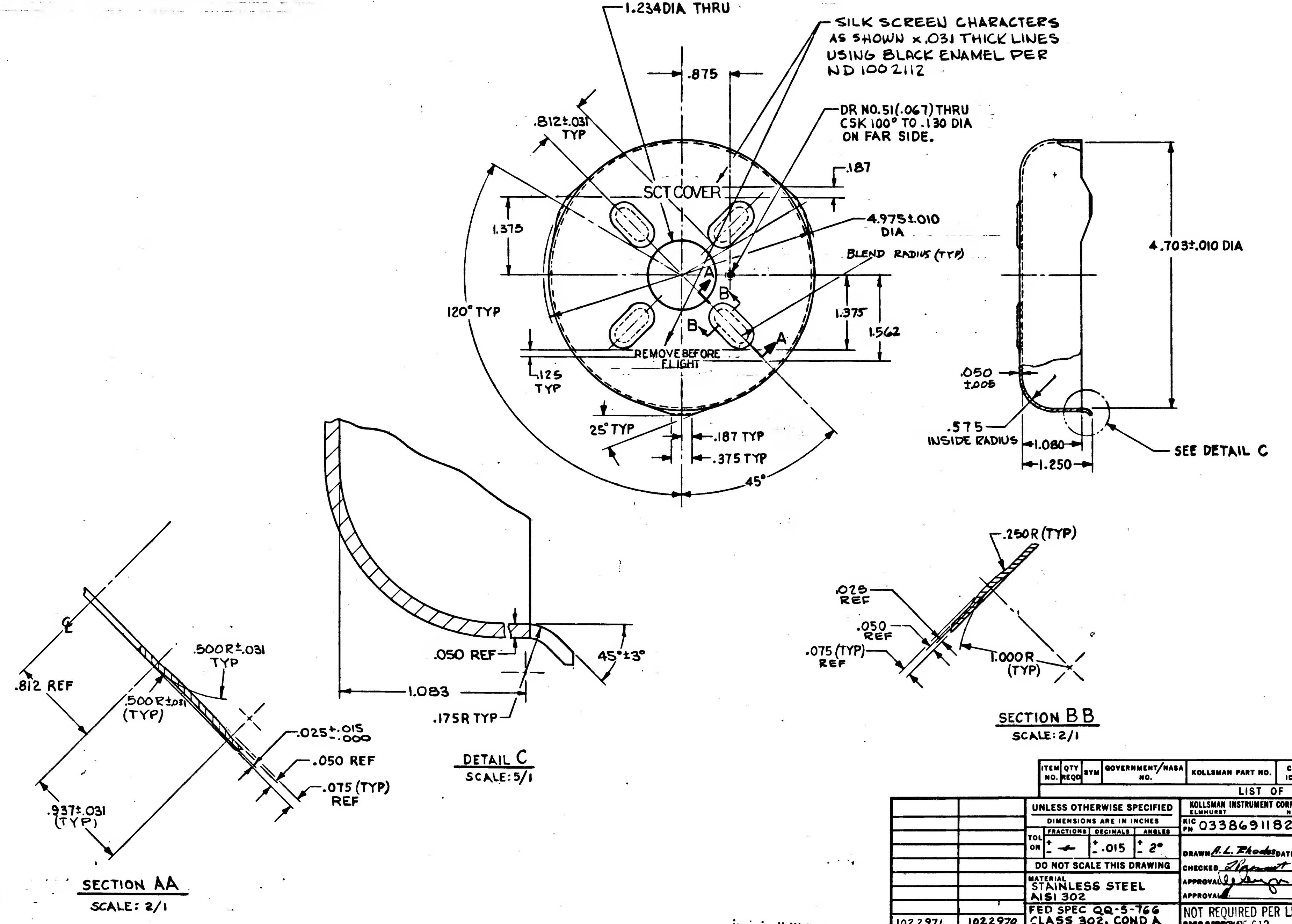
TITLE
COVER, OUTSIDE

CODE IDENT NO. 89944
SIZE E
NASA NUMBER 1022553
SCALE 1/1
WEIGHT CALC ACTUAL
SHEET 1 OF 1

1022553

REVISIONS		23061		
SYM	ZONE	DESCRIPTION	DATE	APPROVAL
—	—	INITIAL RELEASE CLASS A PER TDRR		

NOTES:
1-INTERPRET DRAWING PER MIL-D-70327.
2-GENERAL MACHINING STANDARDS PER ND1002078.
3-REMOVE BURRS PER ND1002079.
4-FINISH 125√ UNLESS OTHERWISE SPECIFIED.
5-APPLY ZINC CHROMATE PRIMER PER MIL-P-8585
APPLY (2) TWO COATS YELLOW ENAMEL, PER
TT-E-489 CLASS A COLOR NO. 13655
OF FED.-STD-595
6-IDENTIFY USING NASA DRAWING NO., REVISION
LETTER AND MANUFACTURER'S SYMBOL
PER ND 1002019 (BAGGED OR TAGGED).



MASTER

ITEM NO.	QTY REQD	SYM	GOVERNMENT/NASA NO.	KOLLSMAN PART NO.	CODE IDENT	NOMENCLATURE OR DESCRIPTION	MATERIAL	SPECIFICATION	UNIT WT

LIST OF PARTS AND MATERIALS

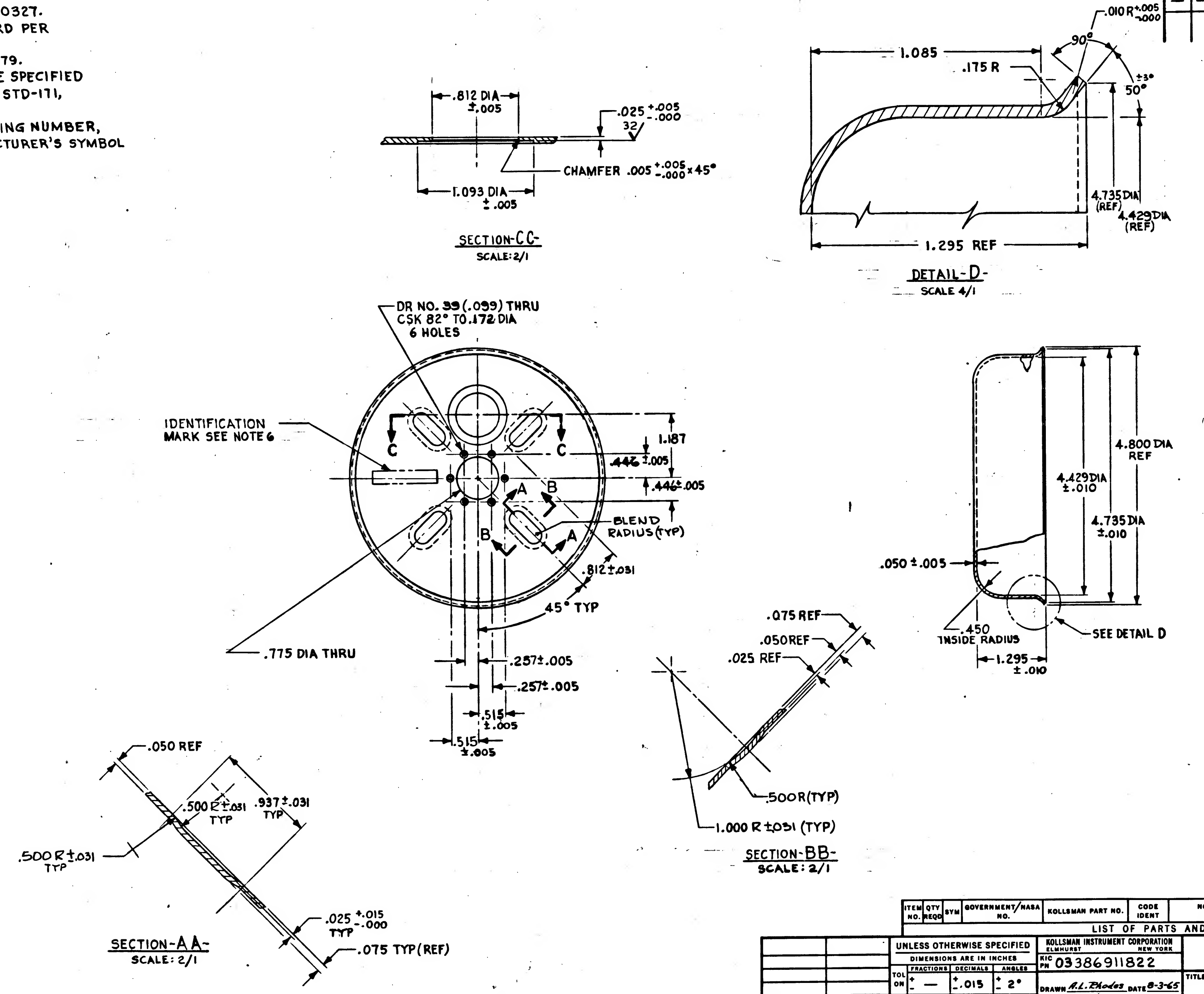
1022971	1022970	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOL ON: FRACTIONS ± —; DECIMALS ± .015; ANGLES ± 2° DO NOT SCALE THIS DRAWING	KOLLSMAN INSTRUMENT CORPORATION ELMHURST NEW YORK KIC PN 03386911823 DRAWN A.L. Rhodes DATE 8-2-65 CHECKED 8-5-65 APPROVAL APPROVAL	MANNED SPACECRAFT CENTER HOUSTON, TEXAS	TITLE COVER, OUTSIDE
NEXT ASSY	USED ON	MATERIAL STAINLESS STEEL AISI 302 FED SPEC QQ-S-766 CLASS 302, COND A	NOT REQUIRED PER LETTER ~~NASA APPROVAL 65-612~~	CODE IDENT NO. 89944	SIZE D
APPLICATION		CONTRACT NAS 9-497	MIT APPROVAL	SCALE 1/1	WEIGHT CALC ACTUAL

NASA NUMBER 1022555
SHEET 1 OF 1

AD-1380

NOTES:
1-INTERPRET DWG PER MIL-D-70327.
2-GENERAL MACHINING STANDARD PER ND1002078.
3-REMOVE BURRS PER ND1002079.
4-FINISH 125✓ UNLESS OTHERWISE SPECIFIED
5-FINISH: PASSIVATE PER MIL-STD-171, FINISH NO. 5.4.1.
6-IDENTIFY USING NASA DRAWING NUMBER, REVISION LETTER AND MANUFACTURER'S SYMBOL PER ND1002019.

REVISIONS 3061				
SYM	ZONE	DESCRIPTION	DATE	APPROVAL
—	—	INTIAL RELEASE CLASS A PER TDRR		



MASTER

ITEM NO.	QTY REQD	SYM	GOVERNMENT/NASA NO.	KOLLSMAN PART NO.	CODE IDENT	NOMENCLATURE OR DESCRIPTION	MATERIAL	SPECIFICATION	UNIT WT

LIST OF PARTS AND MATERIALS

1022969	1022970
NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOL ON: FRACTIONS ± —; DECIMALS ±.015; ANGLES ± 2°
DO NOT SCALE THIS DRAWING
MATERIAL STAINLESS STEEL AISI 302
FED SPEC QQ-S-766 CLASS 302, COND A
CONTRACT NAS 9-497

KOLLSMAN INSTRUMENT CORPORATION
ELMHURST NEW YORK
KIC PN 03386911822
DRAWN A.L. Rhodes DATE 8-3-65
CHECKED 8-5-65
APPROVAL
APPROVAL
NOT REQUIRED PER LETTER NASA-PTS-65-612
MIT APPROVAL

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

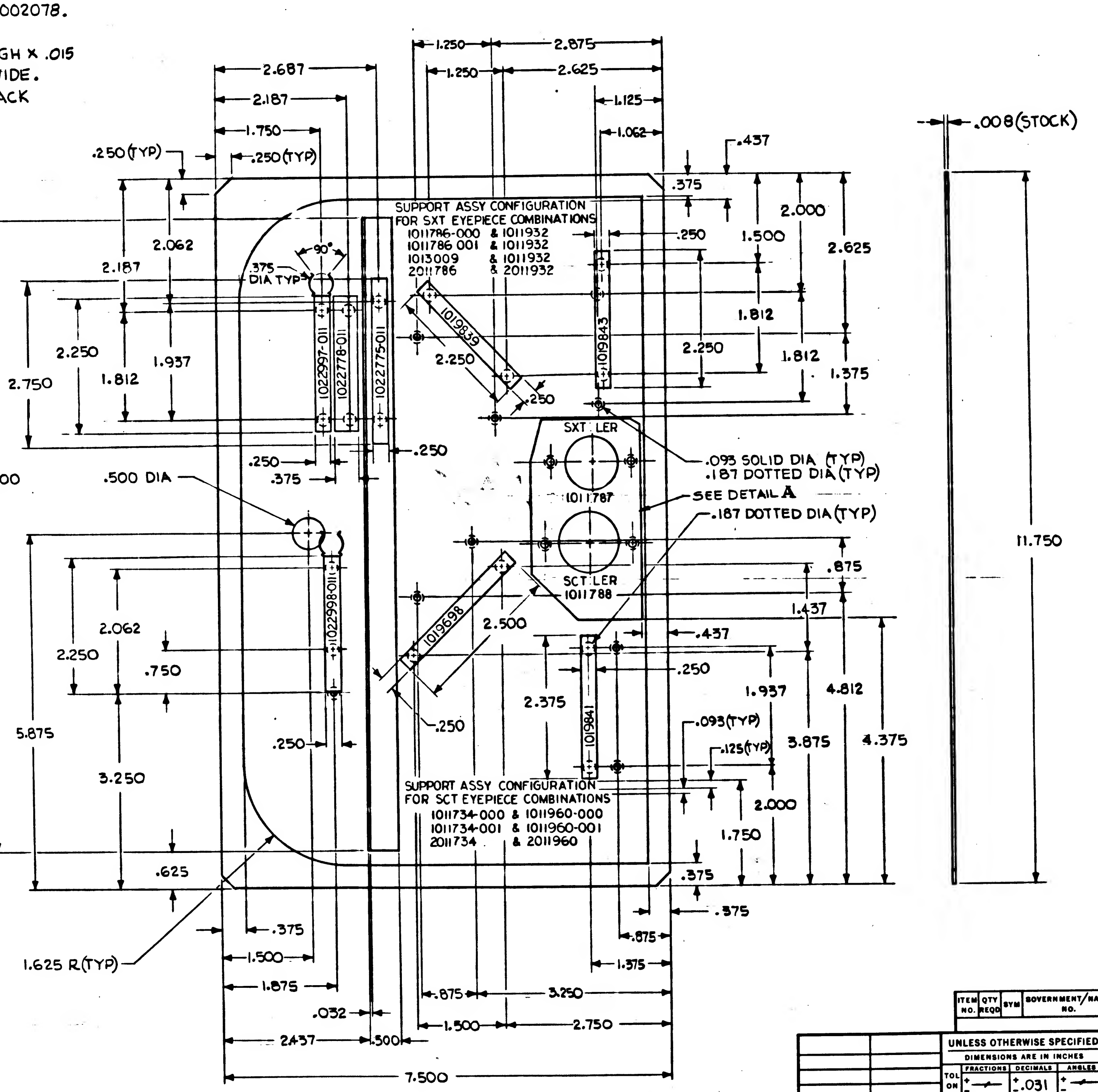
TITLE
COVER, INSIDE

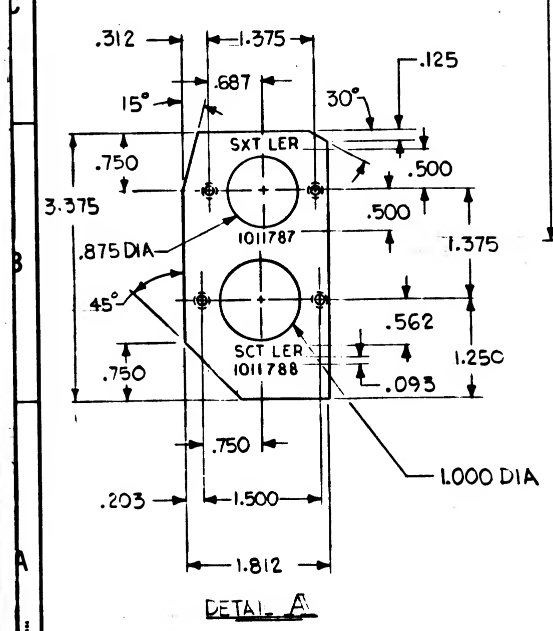
CODE IDENT NO. 89944
SIZE D
NASA NUMBER 1022556
SCALE 1/1
WEIGHT CALC ACTUAL
SHEET 1 OF 1

1022556

NOTES:
1- INTERPRET DWG PER MIL-D-70327.
2- GENERAL MACHINING STANDARDS PER ND1002078.
3- REMOVE BURRS PER ND1002079.
4- ALL CHARACTERS AND LETTERS TO BE .125 HIGH × .015 WIDE LINES. ALL LINES TO BE .015-.020 WIDE.
5- CHARACTERS, LETTERS AND LINES TO BE BLACK ON A CLEAR BACKGROUND.
6- PLATE TO BE IN ACCORDANCE WITH MIL-P-15024 TYPE "H" EXCEPT FOR THICKNESS OF MATERIAL.
7- SURFACE OF PLATE SHALL BE SUITABLY COATED OR FINISHED INCLUDING CHARACTERS, ETC. PLATE TO WITHSTAND 25 HRS OF SALT SPRAY AT 95°F.
8- MATERIAL: ALUMINUM ALLOY 1100-O PER FED. SPEC QQ-A-250/1 TEMP O.

REVISIONS				
SYM	ZONE	DESCRIPTION	DATE	APPROVAL
–	–	INITIAL RELEASE CLASS A PER TDRR 25750		





DETAIL A

MASTER

ITEM NO.	QTY REQD	SYM	GOVERNMENT/NASA NO.	KOLLSMAN PART NO.	CODE IDENT	NOMENCLATURE OR DESCRIPTION	MATERIAL	SPECIFICATION	UNIT WT

LIST OF PARTS AND MATERIALS

NEXT ASSY	USED ON
1019665	1019720

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES

TOL ON	FRACTIONS	DECIMALS	ANGLES
	± —	± .031	± —

DO NOT SCALE THIS DRAWING

MATERIAL: SEE NOTE 8

CONTRACT: NAS9-497

KOLLSMAN INSTRUMENT CORPORATION
ELMHURST NEW YORK
KIC PN 03386912090

DRAWN A.S. Andolfi DATE 1-19-66
CHECKED 1-21-66
APPROVAL 1-21-66
APPROVAL
A. C. METZGER
NASA APPROVAL
MIT APPROVAL

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

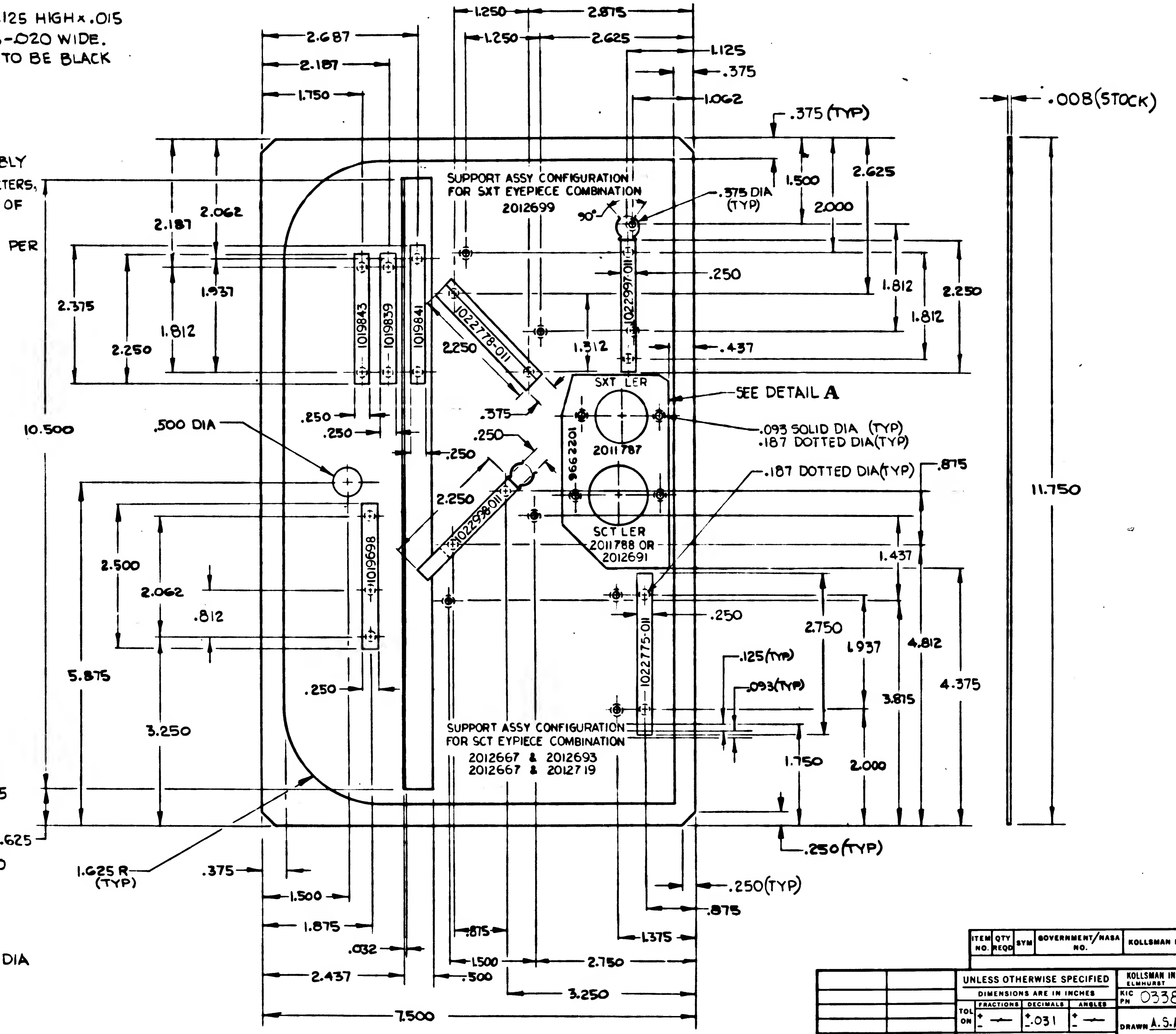
TITLE
CHART, CONFIGURATION

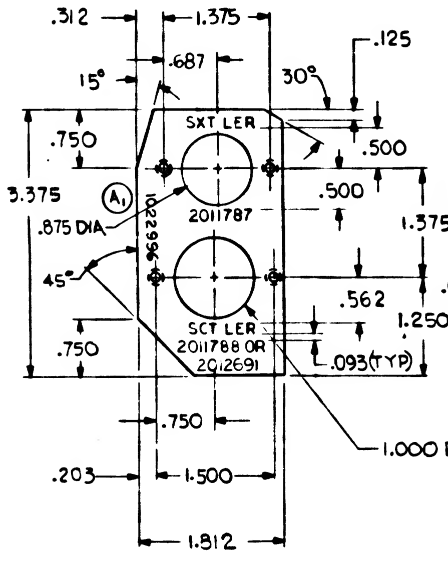
CODE IDENT NO. 89944
SIZE D
NASA NUMBER 1022577
SCALE 1:1
WEIGHT
CALC ACTUAL
SHEET 1 OF 1

1022577

NOTES:
1- INTERPRET DWG PER MIL-D-70327.
2- GENERAL MACHINING STANDARDS PER ND1002078.
3- REMOVE BURRS PER ND1002079.
4- ALL CHARACTERS AND LETTERS TO BE .125 HIGH x .015 WIDE LINES. ALL LINES TO BE .015-.020 WIDE.
5- CHARACTERS, LETTERS AND LINES TO BE BLACK ON A CLEAR BACKGROUND.
6- PLATE TO BE IN ACCORDANCE WITH MIL-P-15024 TYPE 'H' EXCEPT FOR THICKNESS OF MATERIAL.
7- SURFACE OF PLATE SHALL BE SUITABLY COATED OR FINISHED INCLUDING CHARACTERS, ETC. PLATE TO WITHSTAND 25 HRS OF SALT SPRAY AT 95°F.
8- MATERIAL: ALUMINUM ALLOY 1100-0 PER FED. SPEC QQ-A-250/1 TEMP 0.
9. LER INDICATES LONG EYE RELIEF

REVISIONS				
SYM	ZONE	DESCRIPTION	DATE	APPROVAL
—	—	INITIAL RELEASE CLASS A PER TDRR 25756		
A,		REVISED PER ECO NO. 115818 TDRR NO. G30833 DATE 8-26-66	9-1[illegible] ALR	[illegible] 3[illegible]





DETAIL A

ITEM NO.	QTY REQD	SYM	GOVERNMENT/NASA NO.	KOLLSMAN PART NO.	CODE IDENT	NOMENCLATURE OR DESCRIPTION	MATERIAL	SPECIFICATION	UNIT WT

LIST OF PARTS AND MATERIALS

NEXT ASSY	USED ON
1019665	1019720

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOL ON: FRACTIONS ± — ; DECIMALS ± .031 ; ANGLES ± —
DO NOT SCALE THIS DRAWING
MATERIAL: SEE NOTE 8
CONTRACT: NAS 9-497

KOLLSMAN INSTRUMENT CORPORATION
ELMHURST NEW YORK
KIC PN 03386912111
DRAWN A. S. Andolfi DATE 1-19-66
CHECKED [illegible] 1-21-66
APPROVAL [illegible] 1-21-66
APPROVAL
NASA APPROVAL A. C. METZGER
MIT APPROVAL [illegible]

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

TITLE: CHART, CONFIGURATION

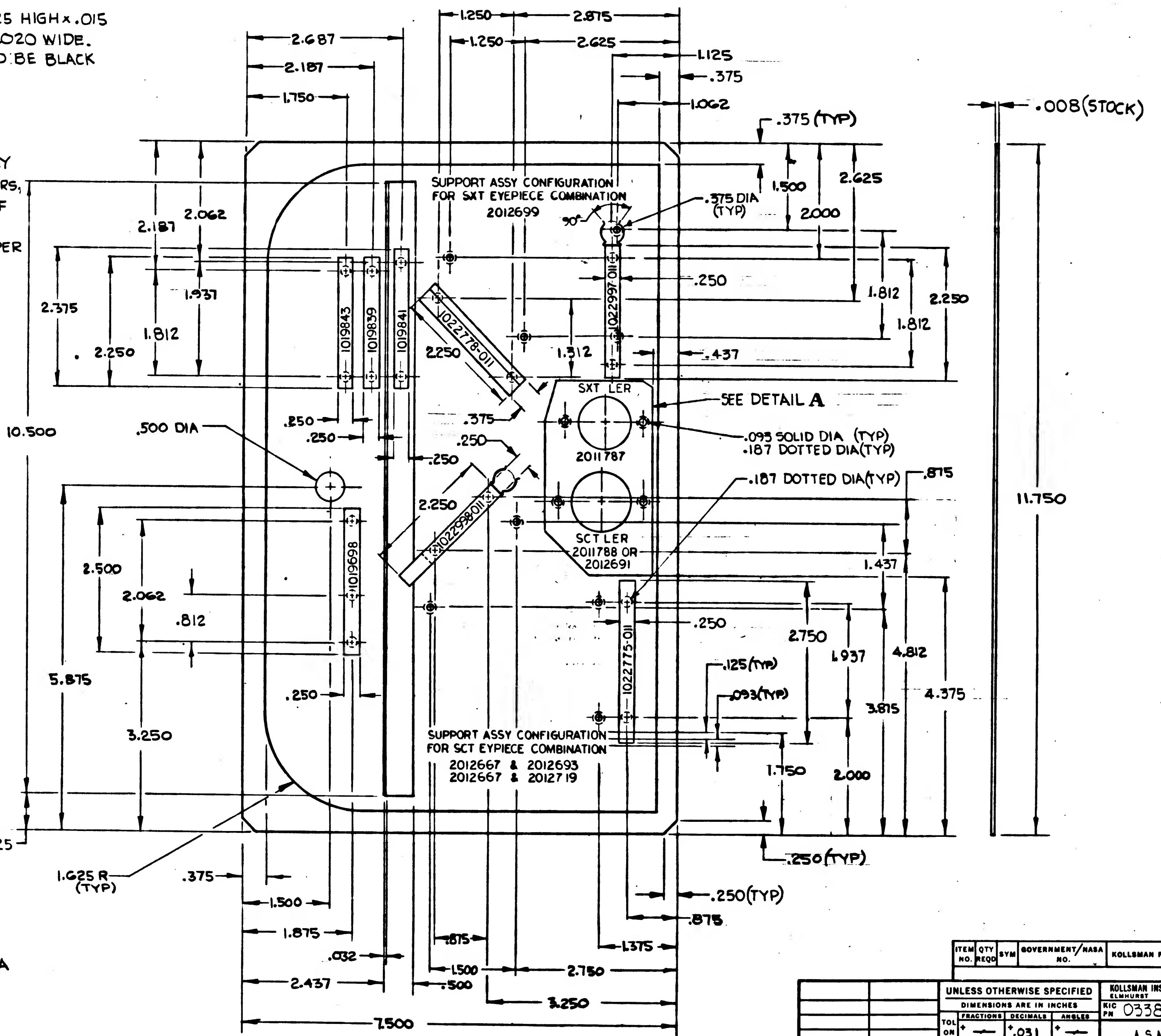
CODE IDENT NO. 89944
SIZE D
NASA NUMBER 1022578
SCALE 1:1
WEIGHT CALC ACTUAL
SHEET OF

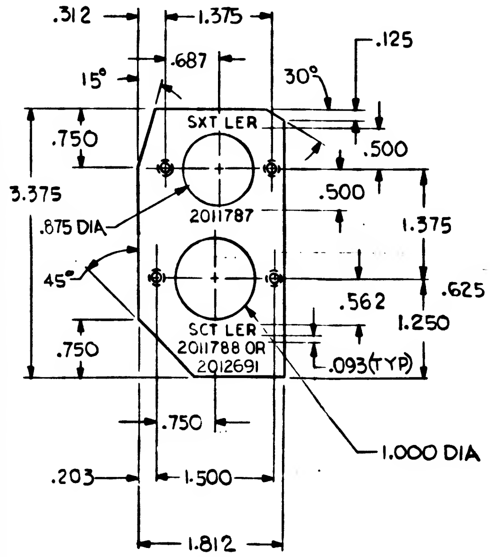
1022578

AD-1300

NOTES:
1- INTERPRET DWG PER MIL-D-70327.
2- GENERAL MACHINING STANDARDS PER ND1002078.
3- REMOVE BURRS PER ND1002079.
4- ALL CHARACTERS AND LETTERS TO BE .125 HIGH x .015 WIDE LINES. ALL LINES TO BE .015-.020 WIDE.
5- CHARACTERS, LETTERS AND LINES TO BE BLACK ON A CLEAR BACKGROUND.
6- PLATE TO BE IN ACCORDANCE WITH MIL-P-15024 TYPE "H" EXCEPT FOR THICKNESS OF MATERIAL.
7- SURFACE OF PLATE SHALL BE SUITABLY COATED OR FINISHED INCLUDING CHARACTERS, ETC. PLATE TO WITHSTAND 25 HRS OF SALT SPRAY AT 95°F.
8- MATERIAL: ALUMINUM ALLOY 1100-0 PER FED. SPEC QQ-A-250/1 TEMP O.
9. LER INDICATES LONG EYE RELIEF

REVISIONS				
SYM	ZONE	DESCRIPTION	DATE	APPROVAL
–	–	INITIAL RELEASE CLASS A PER TDRR 25756		





DETAIL A

ITEM NO.	QTY REQD	SYM	GOVERNMENT/NASA NO.	KOLLSMAN PART NO.	CODE IDENT	NOMENCLATURE OR DESCRIPTION	MATERIAL	SPECIFICATION	UNIT WT

LIST OF PARTS AND MATERIALS

1019665	1019720
NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOL ON: FRACTIONS ± — DECIMALS ±.031 ANGLES ± —
DO NOT SCALE THIS DRAWING
MATERIAL: SEE NOTE 8
CONTRACT: NAS 9-497

KOLLSMAN INSTRUMENT CORPORATION
ELMHURST NEW YORK
KIC PN 03386912111
DRAWN A. S. Andolft DATE 1-19-66
CHECKED 1-21-66
APPROVAL 1-21-66
APPROVAL
NASA APPROVAL A. C. METZGER
MIT APPROVAL

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS
TITLE: CHART, CONFIGURATION
CODE IDENT NO. 89944
SIZE D
NASA NUMBER 1022578
SCALE 1:1
WEIGHT
CALC ACTUAL
SHEET OF

MASTER

1022578

REVISIONS				
SYM	ZONE	DESCRIPTION	DATE	AP V L
—	—	CLASS A RELEASE PER TDRR25646 DATE		

NOTES:

1- INTERPRET DRAWING PER MIL-D-70327.

2- GENERAL MACHINING STANDARDS PER ND1002078.

3- REMOVE BURRS PER ND1002079.

4- FINISH 125/ UNLESS OTHERWISE SPECIFIED.

5- FINISH- CHEMICAL FILM PER MIL-C-5541, GRADE C, TYPE I OR II, CLASS 2 ALL OVER. APPLY ZINC CHROMATE PRIMER PER MIL-P-8585 TO ALL OUTSIDE SURFACES OF BASE AND COVER. APPLY TWO(2) COATS SEMI-GLOSS ENAMEL PER TT-E-529, CLASS B, COLOR NO. 26251 OF FED. STD 595 TO ALL OUTSIDE SURFACES OF BASE AND COVER WHEN ASSEMBLED.

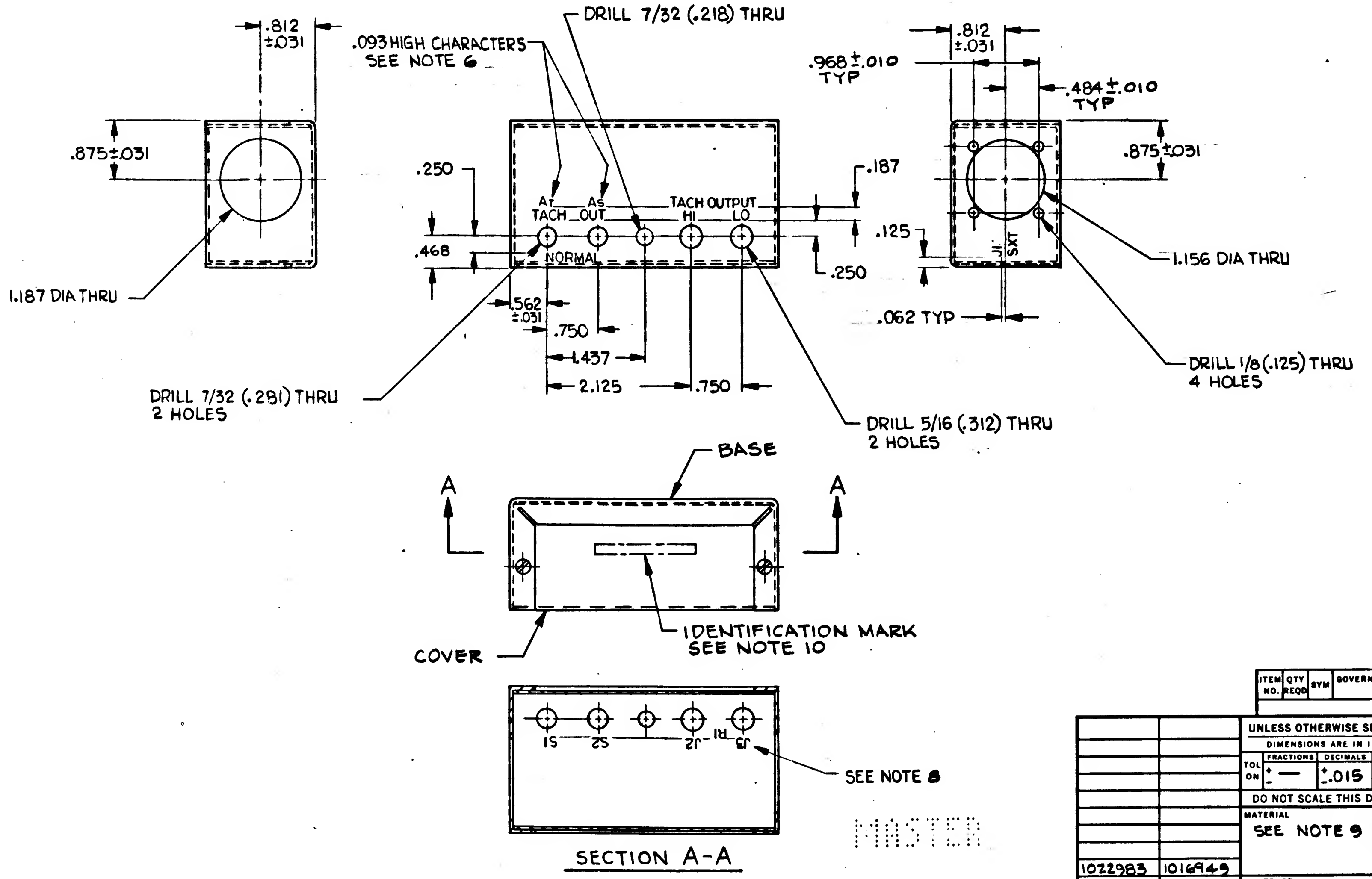
6- ENGRAVE CHARACTERS AS SHOWN ON BASE. CHARACTERS TO BE .125 HIGH x .020 WIDE LINE x .010 DEEP EXCEPT AS NOTED.

7- FILL ENGRAVING WITH BLACK PAINT, COLOR NO. 37038 OF FED. STD 595.

8- MARK ELECTRICAL REF DESIGNATIONS ON INSIDE OF BASE .125 HIGH PER ND1002019.

9- MATERIAL: SEE NASA DWG 1001922-001.

10- IDENTIFY USING NASA DWG NO., REVISION LETTER AND MANUFACTURER'S SYMBOL PER ND1002019.



MASTER

ITEM NO.	QTY REQD	SYM	GOVERNMENT/NASA NO.	KOLLSMAN PART NO.	CODE IDENT	NOMENCLATURE OR DESCRIPTION	MATERIAL	SPECIFICATION	UNIT WT

LIST OF PARTS AND MATERIALS

1022983	1016949
NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES

TOL ON	FRACTIONS	DECIMALS	ANGLES
	± —	± .015	± —

DO NOT SCALE THIS DRAWING

MATERIAL
SEE NOTE 9

CONTRACT
NAS 9-497

KOLLSMAN INSTRUMENT CORPORATION
ELMHURST NEW YORK
KIC PN 03386912079

DRAWN A.S. Andolfi DATE 12-9-65
CHECKED R. De Carlo 12-9-65
APPROVAL 12/15/61
APPROVAL

A. C. METZGER
NASA APPROVAL
MIT APPROVAL

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

TITLE
ENCLOSURE, ELECTRONIC
(ALTERED COMMERCIAL STANDARD)

CODE IDENT NO.	SIZE	NASA NUMBER
89944	D	1022608

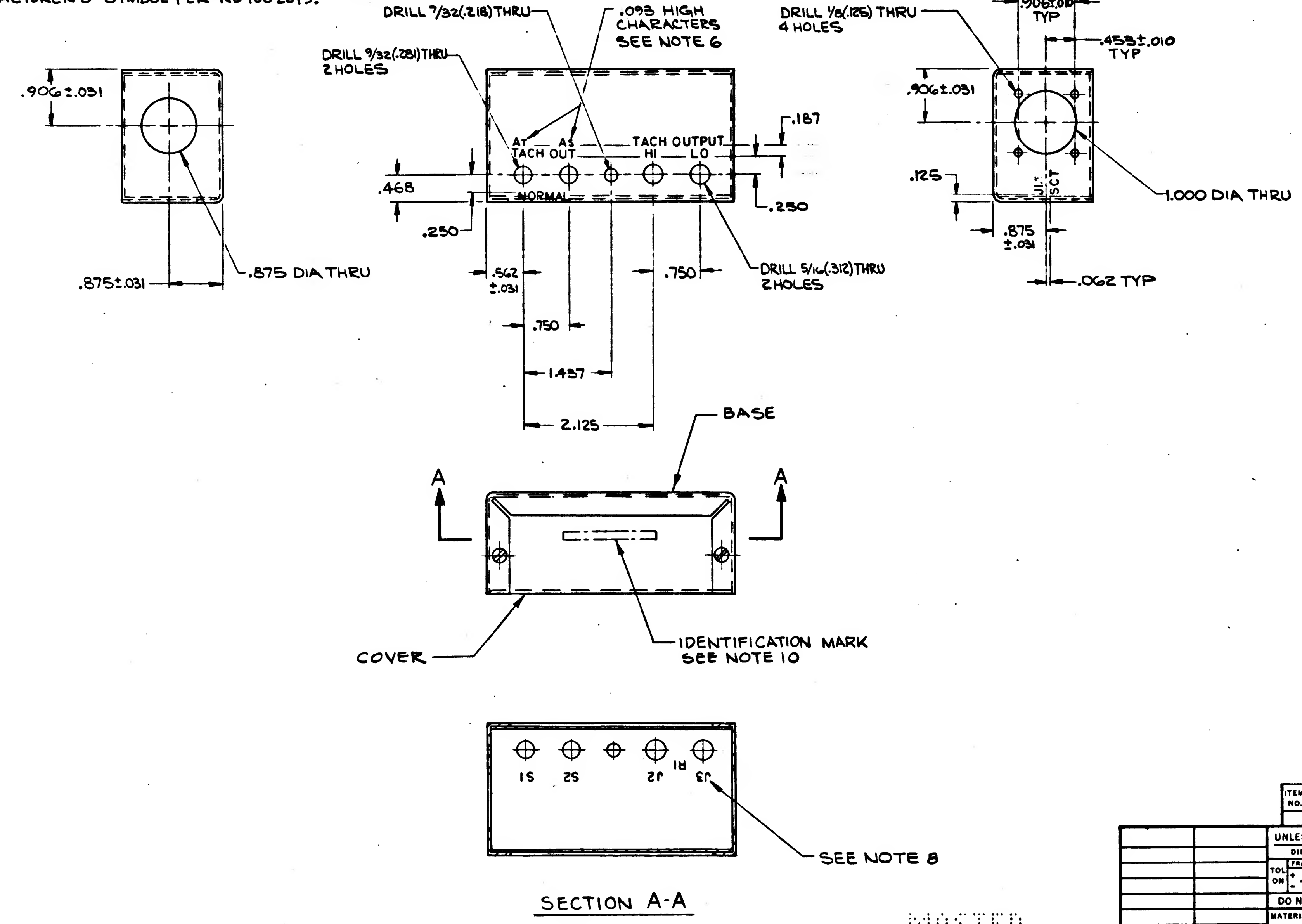
SCALE 1/1 | WEIGHT | CALC ACTUAL | SHEET 1 OF 1

AD-1380

REVISIONS				
SYM	ZONE	DESCRIPTION	DATE	APPROVAL
—	—	INITIAL RELEASE CLASS A PER TDRR 25646 DATE		

NOTES:

1- INTERPRET DWG PER MIL-D-70327.
2- GENERAL MACHINING STANDARDS PER ND 1002078.
3- REMOVE BURRS PER ND1002079.
4- FINISH 125 UNLESS OTHERWISE SPECIFIED.
5- FINISH- CHEMICAL FILM PER MIL-C-5541, GRADE C, TYPE I OR II, CLASS 2 ALL OVER. APPLY ZINC CHROMATE PRIMER PER MIL-P-8585 TO ALL OUTSIDE SURFACES OF BASE AND COVER. APPLY TWO (2) COATS SEMI-GLOSS ENAMEL PER TT-E-529, CLASS B. COLOR NO. 26251 OF FED. STD 595 TO ALL OUTSIDE SURFACES OF BASE AND COVER WHEN ASSEMBLED.
6- ENGRAVE CHARACTERS AS SHOWN ON BASE. CHARACTERS TO BE .125 HIGH X .020 WIDE LINE X .010 DEEP EXCEPT AS NOTED.
7- FILL ENGRAVING WITH BLACK PAINT, COLOR NO. 37038 OF FED. STD 595.
8- MARK ELECTRICAL REF DESIGNATIONS ON INSIDE OF BASE .125 HIGH PER ND 1002019.
9- MATERIAL: SEE NASA DWG 1001922-001.
10- IDENTIFY USING NASA DWG NO., REVISION LETTER AND MANUFACTURER'S SYMBOL PER ND1002019.



MASTER

ITEM NO.	QTY REQD	SYM	GOVERNMENT/NASA NO.	KOLLSMAN PART NO.	CODE IDENT	NOMENCLATURE OR DESCRIPTION	MATERIAL	SPECIFICATION	UNIT WT

LIST OF PARTS AND MATERIALS

NEXT ASSY	USED ON
1022982	1016949

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOL ON: FRACTIONS ± ~ ; DECIMALS ±.015 ; ANGLES ± ~
DO NOT SCALE THIS DRAWING
MATERIAL: SEE NOTE 9
CONTRACT: NAS 9-497

KOLLSMAN INSTRUMENT CORPORATION
ELMHURST NEW YORK
KIC PN 033869 12032
DRAWN Rindeuner DATE 12-9-65
CHECKED R. DeCarlo 12-9-65
APPROVAL 12-15-65
APPROVAL
NASA APPROVAL A. C. METZGER
MIT APPROVAL

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

TITLE
ENCLOSURE, ELECTRONIC
(ALTERED COMMERCIAL STANDARD)

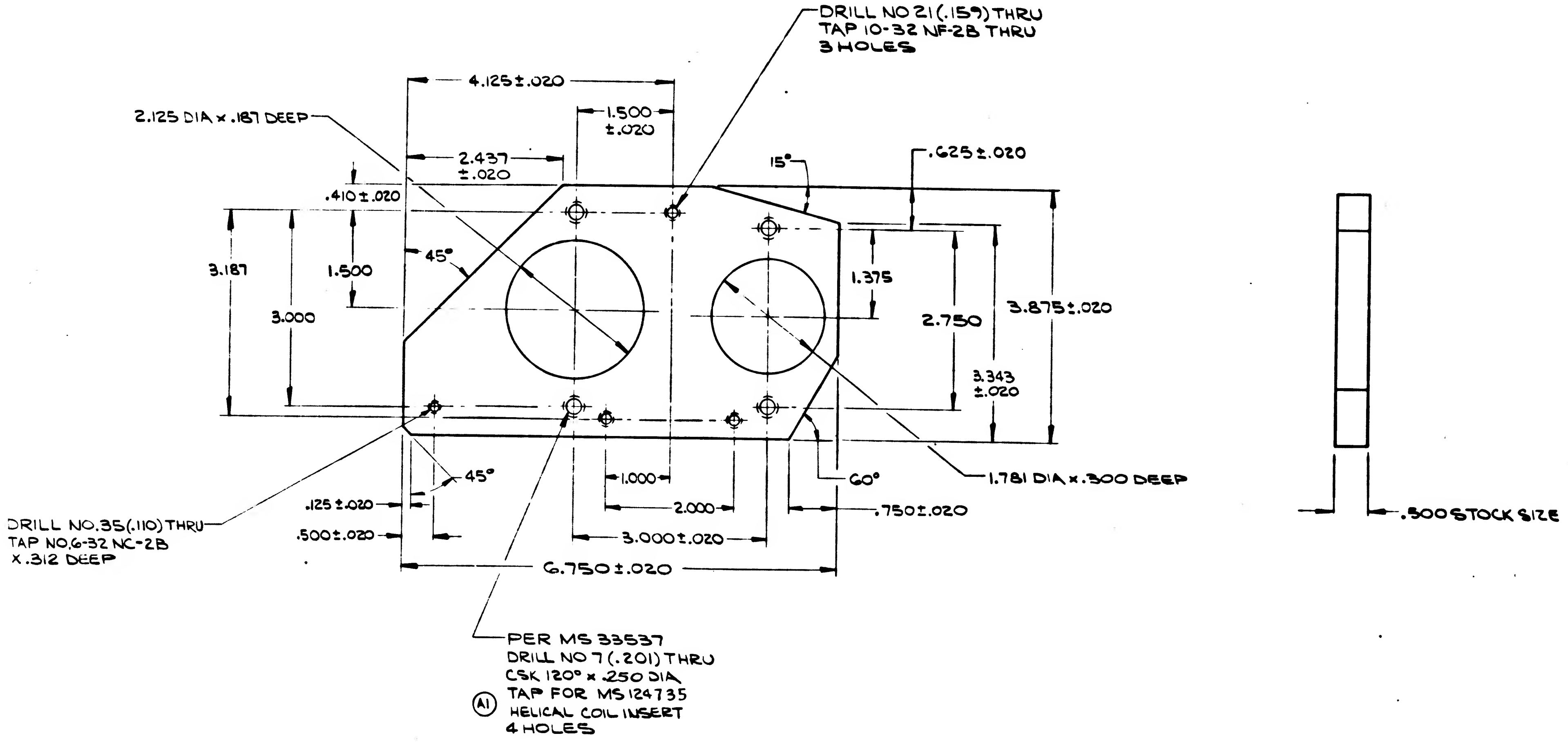
CODE IDENT NO. 89944
SIZE D
NASA NUMBER 1022609
SCALE 1/1
WEIGHT
CALC ACTUAL
SHEET 1 OF 1

AD-1380

NOTES:

1- INTERPRET DWG PER MIL-D-70327
2- GENERAL MACHINING STANDARDS PER ND1002078
3- REMOVE BURRS PER ND 1002079
4- FINISH 125/ UNLESS OTHERWISE SPECIFIED
5- FINISH-ANODIZE PER MIL-A-8625 TYPE II (BLACK)
6- IDENTIFY USING NASA DWG NO, REVISION LETTER
AND MANUFACTURERS SYMBOL PER ND1002019
(BAG OR TAG)

REVISIONS				
SYM	ZONE	DESCRIPTION	DATE	APPROVAL
—	—	INITIAL RELEASE CLASS A PER TDRR Y5756		
A1		REVISED PER ECO 117052 TDRR G 27916 DATE 4-11-66	4-20-66 ALR	E.R. 4 21/6



ITEM NO.	QTY REQD	SYM	GOVERNMENT/NASA NO.	KOLLSMAN PART NO.	CODE IDENT	NOMENCLATURE OR DESCRIPTION	MATERIAL	SPECIFICATION	UNIT WT

LIST OF PARTS AND MATERIALS

NEXT ASSY	USED ON
1022996	1019720

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOL ON: FRACTIONS ± ~ DECIMALS ± .005 ANGLES ± 1°
DO NOT SCALE THIS DRAWING
MATERIAL ALUM ALLOY 2024-T4
FED SPEC QQ-A-225/6
TEMPER T4
CONTRACT NAS 9-497

KOLLSMAN INSTRUMENT CORPORATION
ELMHURST NEW YORK
KIC PN 03386912095
DRAWN DATE 12/21/65
CHECKED
APPROVAL
APPROVAL
NASA APPROVAL
MIT APPROVAL

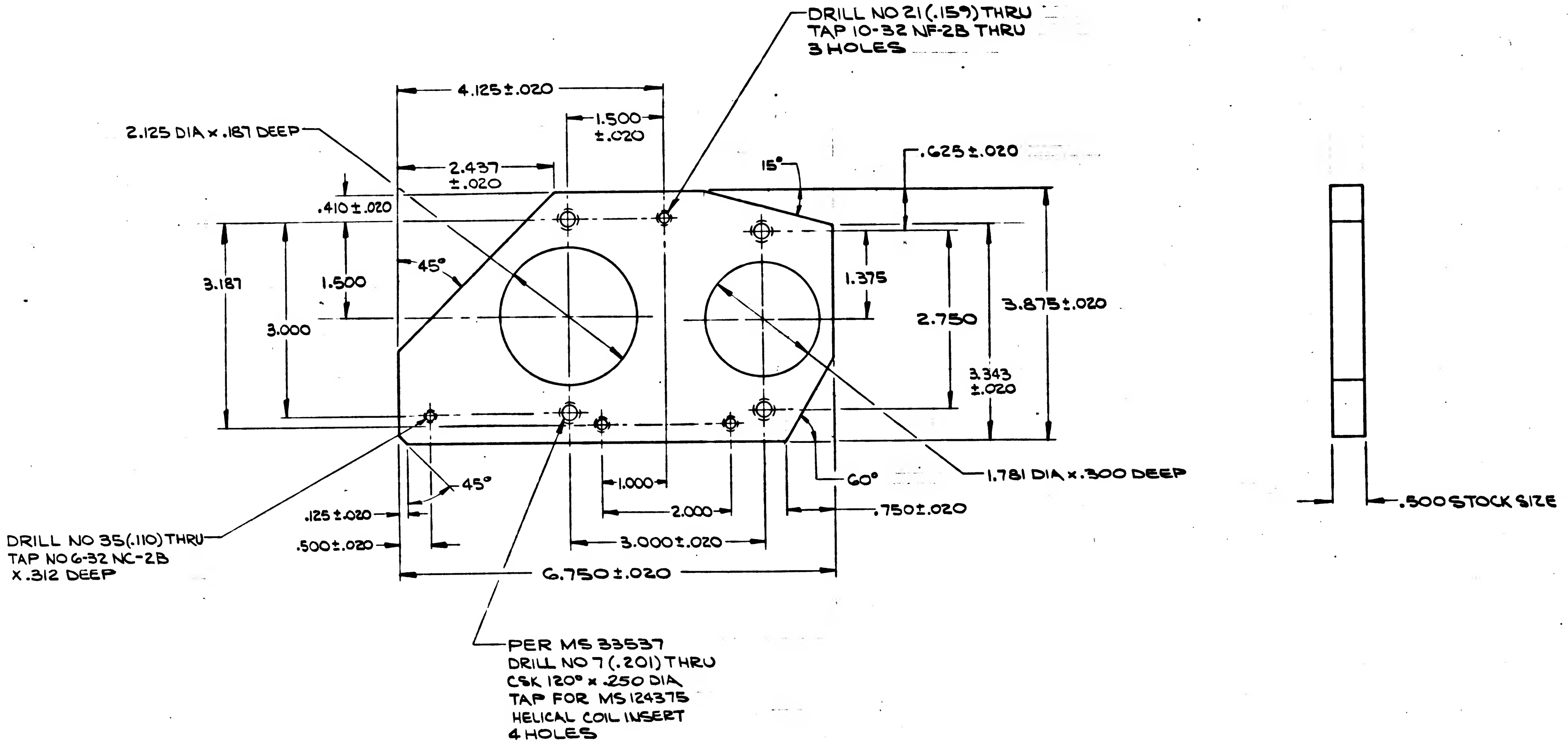
MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

TITLE BLOCK, MOUNTING

CODE IDENT NO. 89944
SIZE D
NASA NUMBER 1022615
SCALE 1/1
WEIGHT CALC ACTUAL
SHEET 1 OF 1

NOTES:
1- INTERPRET DWG PER MIL-D-70327
2- GENERAL MACHINING STANDARDS PER ND1002078
3- REMOVE BURRS PER ND1002079
4- FINISH 125/ UNLESS OTHERWISE SPECIFIED
5- FINISH-ANODIZE PER MIL-A-8625 TYPE II (BLACK)
6- IDENTIFY USING NASA DWG NO, REVISION LETTER AND MANUFACTURERS SYMBOL PER ND1002019 (BAG OR TAG)

REVISIONS				
SYM	ZONE	DESCRIPTION	DATE	APPROVAL
—	—	INITIAL RELEASE CLASS A PER TDRR 25756		



MASTER

ITEM NO.	QTY REQD	SYM	GOVERNMENT/NASA NO.	KOLLSMAN PART NO.	CODE IDENT	NOMENCLATURE OR DESCRIPTION	MATERIAL	SPECIFICATION	UNIT WT

LIST OF PARTS AND MATERIALS

1022996	1019720
NEXT ASSY	USED ON

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES

TOL ON	FRACTIONS	DECIMALS	ANGLES
	± ~	± .005	± 1°

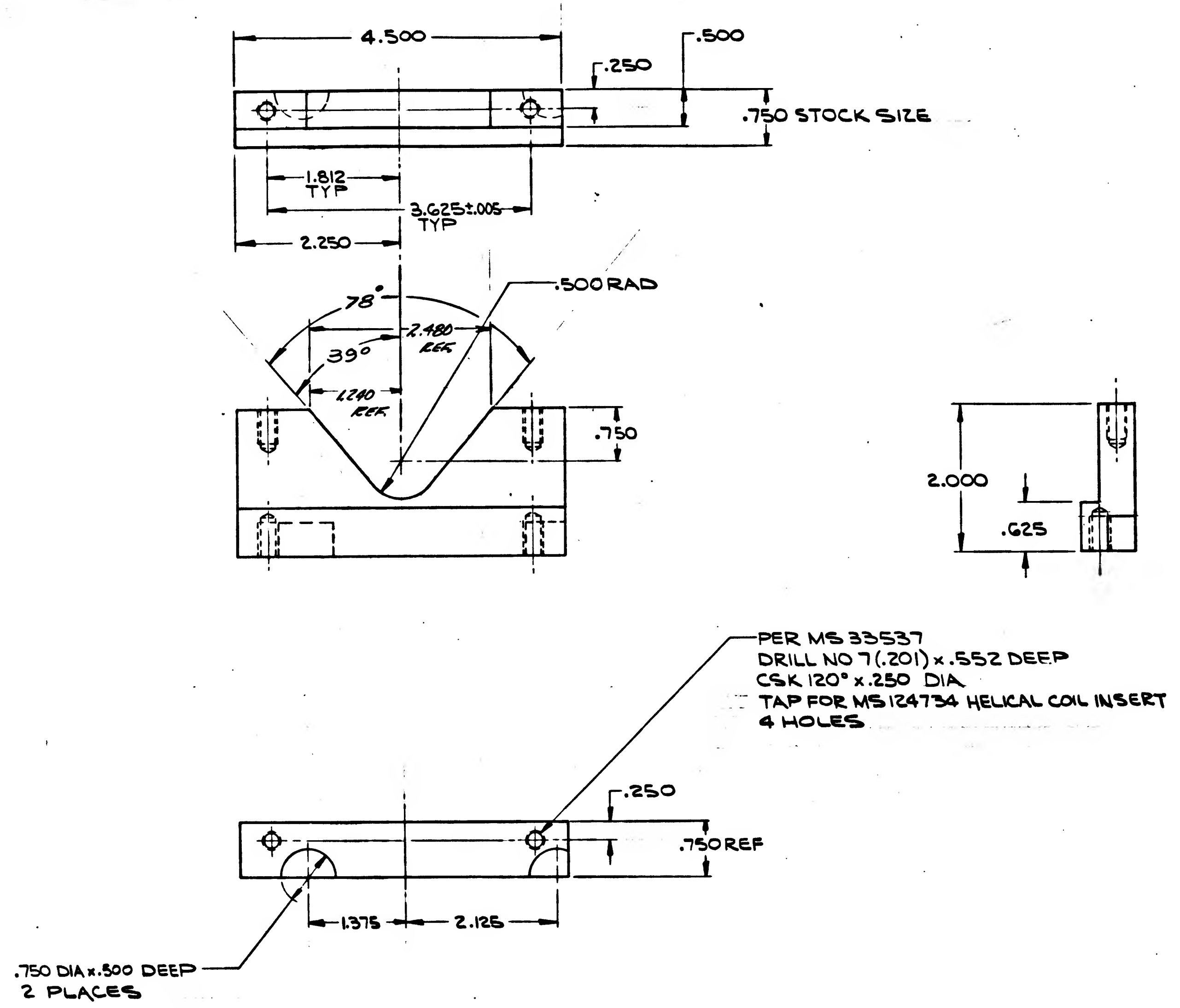
DO NOT SCALE THIS DRAWING
MATERIAL ALUM ALLOY 2024-T4
FED SPEC QQ-A-225/6 TEMPER T4
CONTRACT NAS 9-497

KOLLSMAN INSTRUMENT CORPORATION
ELMHURST NEW YORK
K/C P/N 03386912095
DRAWN Rindfleisch DATE 12/21/65
CHECKED [illegible] 1-19-66
APPROVAL [illegible] 1-14-66
APPROVAL
A. C. METZGER
NASA APPROVAL
MIT APPROVAL [illegible]

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS
TITLE
BLOCK, MOUNTING
CODE IDENT NO. 89944
SIZE D
NASA NUMBER 1022615
SCALE 1/1
WEIGHT
CALC ACTUAL
SHEET OF 1

NOTES:
1-INTERPRET DWG PER MIL-D-70327
2 GENERAL MACHINING STANDARDS PER ND 1002078
3-REMOVE BURRS PER ND 1002079
4.-FINISH $^{125}\surd$ UNLESS OTHERWISE SPECIFIED
5-FINISH-ANODIZE PER MIL-A-8625 TYPE II (BLACK)
6-IDENTIFY USING NASA DWG NO, REVISION LETTER AND MANUFACTURERS SYMBOL PER ND 1002019 (BAG OR TAG)

REVISIONS				
SYM	ZONE	DESCRIPTION	DATE	APPROVAL
—	—	INITIAL RELEASE CLASS A PER TDRR 25756		



MASTER

ITEM NO.	QTY REQD	SYM	GOVERNMENT/NASA NO.	KOLLSMAN PART NO.	CODE IDENT	NOMENCLATURE OR DESCRIPTION	MATERIAL	SPECIFICATION	UNIT WT

LIST OF PARTS AND MATERIALS

NEXT ASSY	USED ON
1022777	1019720

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES

TOL ON	FRACTIONS	DECIMALS	ANGLES
	± ~	± .015	± 1°

DO NOT SCALE THIS DRAWING
MATERIAL ALUM ALLOY 2024-T4
FED SPEC QQ-A-250/4 TEMPER T4
CONTRACT NAS 9-497

KOLLSMAN INSTRUMENT CORPORATION
ELMHURST NEW YORK
KIC PN C3386912096
DRAWN RINDEWNER DATE 12/15/65
CHECKED [illegible] 1-18-66
APPROVAL [illegible] 1/19/66
APPROVAL
A. G. METZGER
NASA APPROVAL
MIT APPROVAL [illegible]

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

TITLE
BLOCK, SUPPORT

CODE IDENT NO.	SIZE	NASA NUMBER
89944	D	1022616

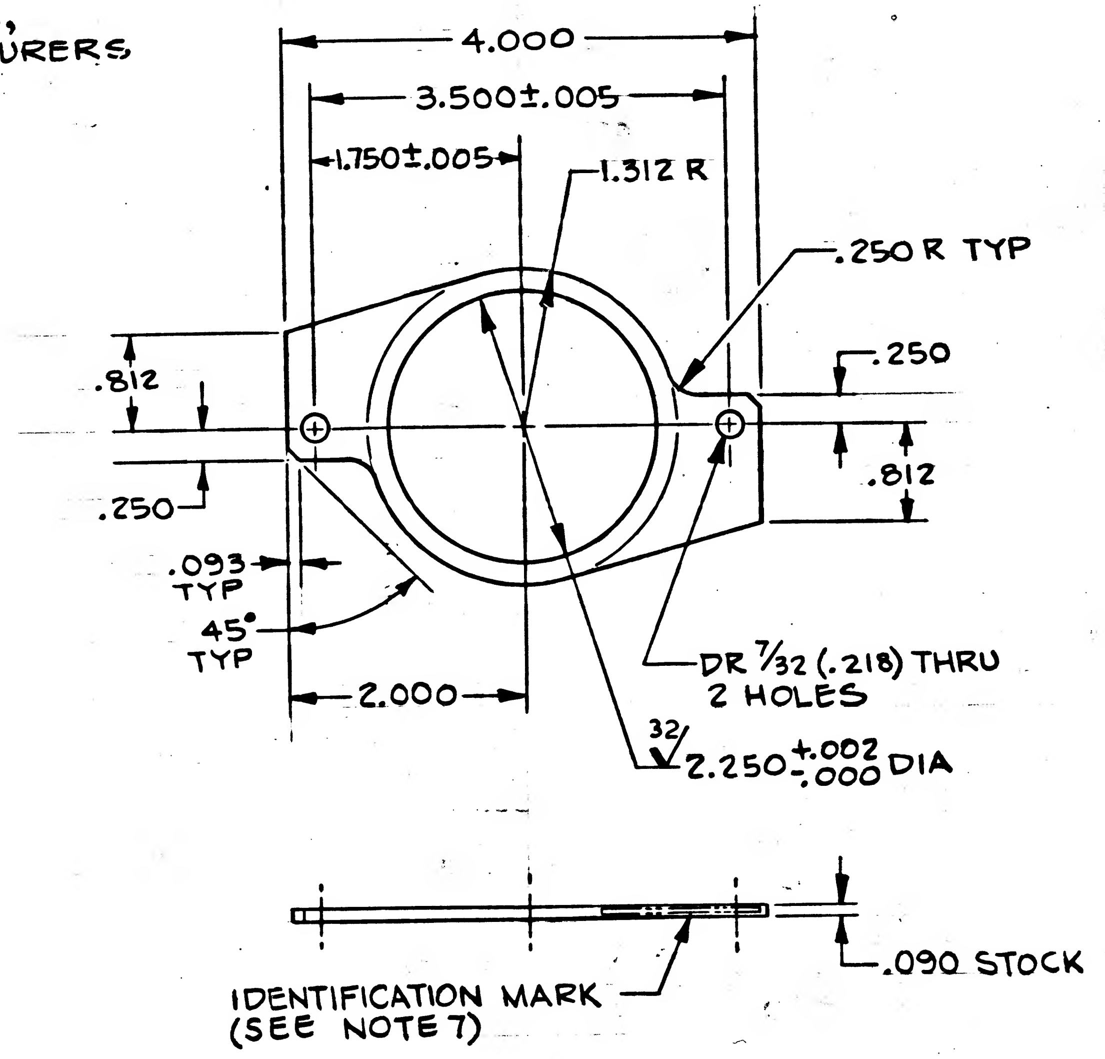
SCALE 1/1 WEIGHT CALC ACTUAL SHEET 1

AD-1380

REVISIONS				
SYM	ZONE	DESCRIPTION	DATE	APPROVAL
—	—	INITIAL RELEASE CLASS A PER TDRR 25756		

NOTES:

1. INTERPRET DRAWING PER MIL-D-70327.
2. GENERAL MACHINING STANDARDS PER ND1002078.
3. REMOVE BURRS PER ND 1002079.
4. FINISH $\overset{125}{\sqrt{}}$ UNLESS OTHERWISE SPECIFIED.
5. PASSIVATE PER MIL-STD-171, FINISH NO. 5.4.1.
6. BLACKEN PER MIL-C-13924, CLASS 3.
7. IDENTIFY USING NASA DWG NO., REVISION LETTER AND MANUFACTURERS SYMBOL PER ND1002019.



ITEM NO.	QTY REQD	SYM	GOVERNMENT/NASA NO.	KOLLSMAN PART NO.	CODE IDENT	NOMENCLATURE OR DESCRIPTION	MATERIAL	SPECIFICATION	UNIT WT

LIST OF PARTS AND MATERIALS

NEXT ASSY	USED ON
1019665	1019720

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES

TOL ON	FRACTIONS	DECIMALS	ANGLES
	± ~	±.010	± 2°

DO NOT SCALE THIS DRAWING
MATERIAL STAINLESS STEEL AISI 302
FED. SPEC-QQ-S-766
CLASS 302 COND A
CONTRACT NAS 9-497

KOLLSMAN INSTRUMENT CORPORATION
ELMHURST NEW YORK
KIC PN 03386912114
DRAWN AJ PERALTA DATE 1-20-66
CHECKED [illegible] 1-20-66
APPROVAL [illegible] 1-66
APPROVAL
A. C. METZGER
NASA APPROVAL [illegible] 1-66
MIT APPROVAL [illegible]

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

TITLE PLATE, GUIDE

CODE IDENT NO. 89944
SIZE C
NASA NUMBER 1022623
SCALE 1/1
WEIGHT CALC ACTUAL
SHEET 1 OF 1

MASTER

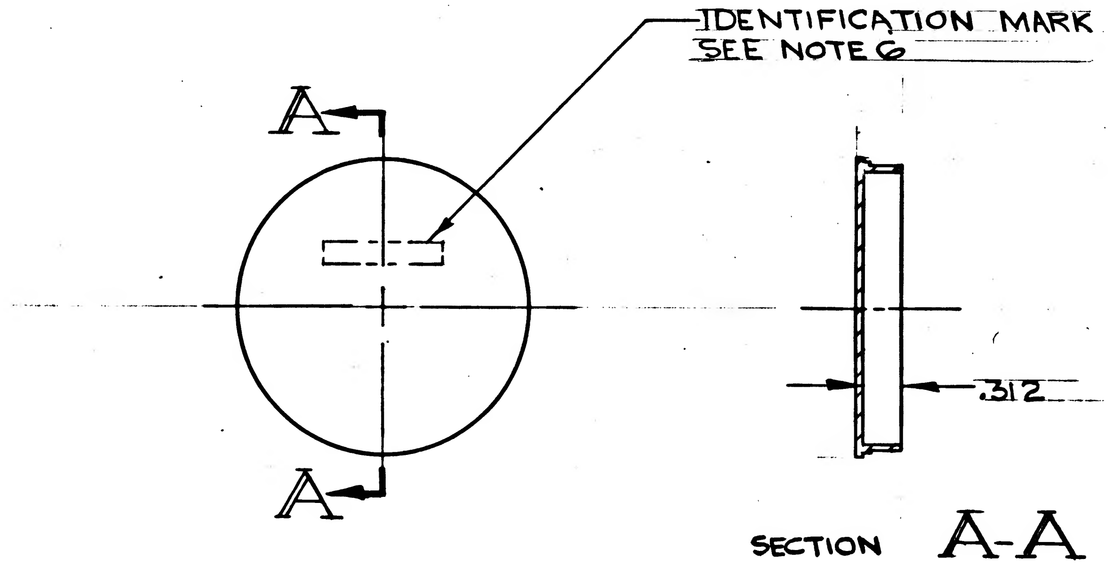
AD-1340

1022623

NOTES:

1- INTERPRET DWG PER MIL-D-70327
2- GENERAL MACHINING STANDARDS PER ND1002078
3- REMOVE BURRS PER ND1002079
4- FINISH 125√ ALL OVER UNLESS OTHERWISE SPECIFIED
5- MATERIAL - USE PART No. 1001886-002
6- IDENTIFY USING NASA DRAWING NO., REV LETTER AND MANUFACTURERS SYM PER ND1002019

REVISIONS				
SYM	ZONE	DESCRIPTION	DATE	APPROVAL
—	—	INITIAL RELEASE CLASS A PER TDRR 27297	—	



ITEM NO.	QTY REQD	SYM	GOVERNMENT/NASA NO.	KOLLSMAN PART NO.	CODE IDENT	NOMENCLATURE OR DESCRIPTION	MATERIAL	SPECIFICATION	UNIT WT

LIST OF PARTS AND MATERIALS

NEXT ASSY	USED ON
1022784	

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES

TOL ON	FRACTIONS	DECIMALS	ANGLES
	±	±.031	±

DO NOT SCALE THIS DRAWING
MATERIAL
SEE NOTE 5
CONTRACT
NAS-9-497

KOLLSMAN INSTRUMENT CORPORATION
ELMHURST NEW YORK
KIC PN 03386912139
DRAWN R CARROLL DATE 2/18/66
CHECKED 2/18/66
APPROVAL 3.4.66
APPROVAL
NASA APPROVAL E. C. METZGER 3/15/66
MIT APPROVAL 7 Mar 66

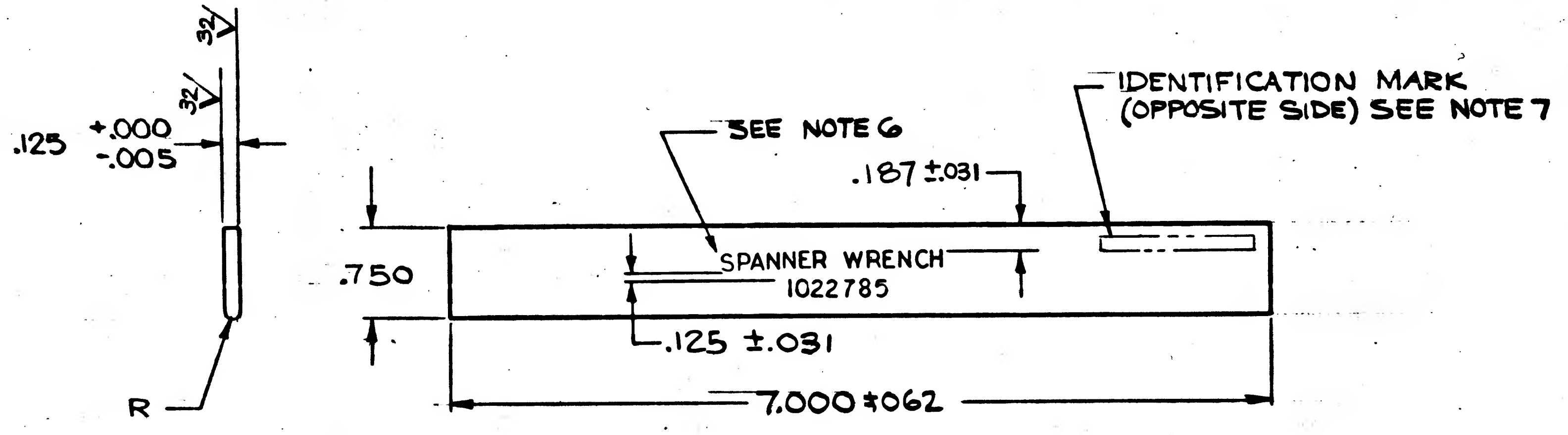
MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS
TITLE
COVER, LENS
ALTERED COMMERCIAL STANDARD
CODE IDENT NO. 89944
SIZE C
NASA NUMBER 1022628
SCALE 1/1
WEIGHT CALC ACTUAL
SHEET 1 OF 1

MASTER

REVISIONS				
SYM	ZONE	DESCRIPTION	DATE	APPROVAL
—	—	INITIAL RELEASE CLASS A PER TDRR 27665		

NOTES:

1. INTERPRET DWG PER MIL-D-70327.
2. GENERAL MACHINING STANDARDS PER ND1002078.
3. REMOVE BURRS PER ND1002079.
4. FINISH 125√ UNLESS OTHERWISE SPECIFIED.
5. PASSIVATE PER MIL-STD-171, FINISH NO. 5.4.1.
6. CENTRALIZE AND ENGRAVE CHARACTERS AS SHOWN .125 HIGH PER ND1002019.
7. IDENTIFY USING NASA DWG NO., REVISION LETTER AND MANUFACTURERS SYMBOL PER ND1002019.



ITEM NO.	QTY REQD	SYM	GOVERNMENT/NASA NO.	KOLLSMAN PART NO.	CODE IDENT	NOMENCLATURE OR DESCRIPTION	MATERIAL	SPECIFICATION	UNIT WT

LIST OF PARTS AND MATERIALS

NEXT ASSY	USED ON
1022785	

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOL ON: FRACTIONS ± ~ DECIMALS ± .015 ANGLES ± ~
DO NOT SCALE THIS DRAWING
MATERIAL STAINLESS STEEL AISI NO. 302
FED. SPEC: QQ-S-766 CLASS 302 COND A
CONTRACT NAS 9-497

KOLLSMAN INSTRUMENT CORPORATION
ELMHURST NEW YORK
KIG PN 03386912142
DRAWN J.P. Domas DATE 2-11-66
CHECKED AJ Peralta 3-11-66
APPROVAL 3-11-66
APPROVAL
NASA APPROVAL A. C. METZGER 3/29/66
MIT APPROVAL 30 Mar 66

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

TITLE
BAR, SPANNER

CODE IDENT NO. 89944
SIZE C
NASA NUMBER 1022637
SCALE 1:1
WEIGHT CALC ACTUAL
SHEET 1 OF 1

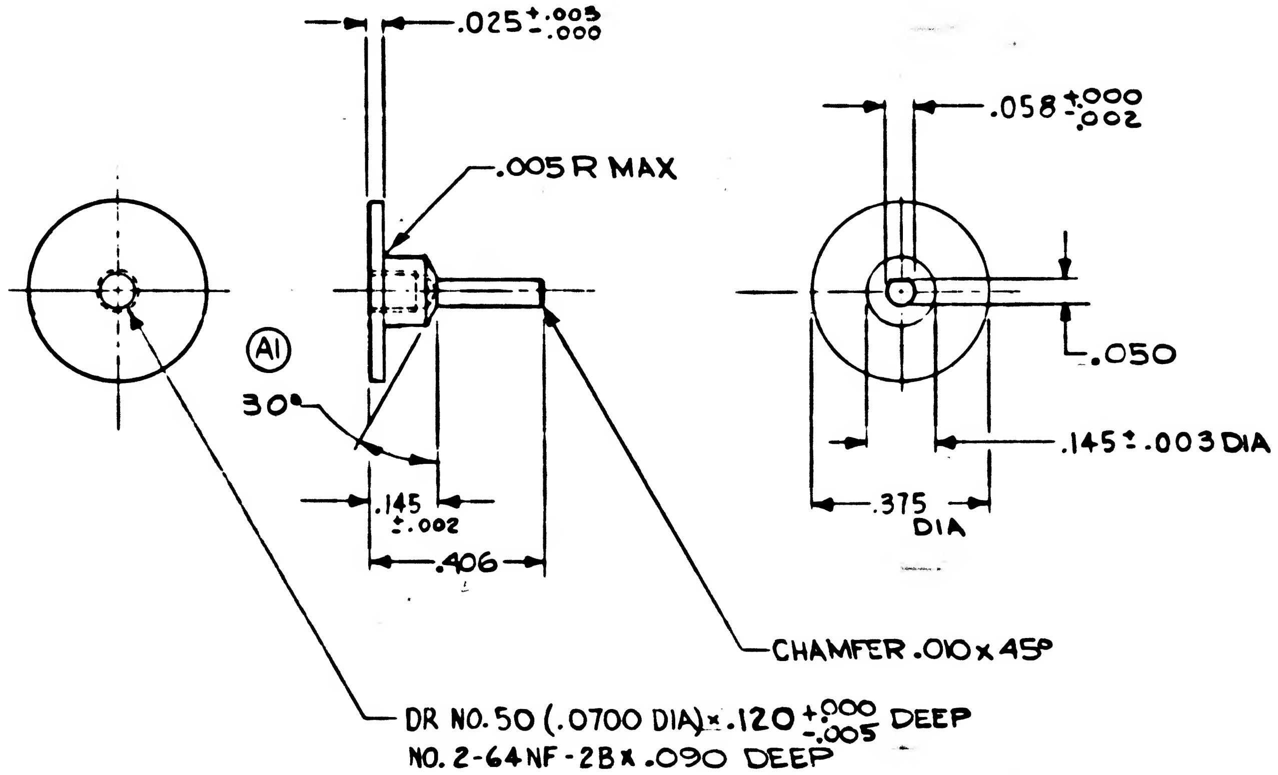
MASTER

AD-1340

1022637

SYM	ZONE	DESCRIPTION	DATE	APPROVAL
—	—	INITIAL RELEASE CLASS A PER TDRR 27299 DATE		
A2		REVISED PER ECO 121112 TDRR G36510 DATE 7/10/68	F.F.P 7/16/68	F F P 7/16/68

NOTES:
1-INTERPRET DWG PER MIL-D-70327.
2-GENERAL MACHINING STANDARDS PER ND1002078.
3-FINISH 63√ UNLESS OTHERWISE SPECIFIED.
4-FINISH: PASSIVATE PER MIL-STD-171, FINISH NO.5.4.1.
5-IDENTIFY USING NASA DRAWING NUMBER REVISION LETTER AND MANUFACTURER'S SYM PER ND-1002019. (BAGGED OR TAGGED).



ITEM NO.	QTY REQD	SYM	GOVERNMENT/NASA NO.	KOLLSMAN PART NO.	CODE IDENT	NOMENCLATURE OR DESCRIPTION	MATERIAL	SPECIFICATION	UNIT WT

LIST OF PARTS AND MATERIALS

A2

NEXT ASSY	USED ON
~~1022893~~	~~6014956~~
~~1022873~~	~~1022850~~
1022893	1019984

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES

TOL ON	FRACTIONS	DECIMALS	ANGLES
	± —	± .005	± 1°

DO NOT SCALE THIS DRAWING

MATERIAL
STAINLESS STEEL
AISI 416
FED.SPEC QQ-S-763
CLASS 416 COND A

CONTRACT
NAS 9-497

KOLLSMAN INSTRUMENT CORPORATION
ELMHURST NEW YORK
KIC PN 03386912151

DRAWN R.L. Rhodes DATE 3-10-64
CHECKED H. DEBONIS 3-14-64
APPROVAL 3-14-64
APPROVAL

NASA APPROVAL A. C. METZGER

MIT APPROVAL

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

TITLE
VALVE, NEEDLE

CODE IDENT NO.	SIZE	NASA NUMBER
89944	C	1022639

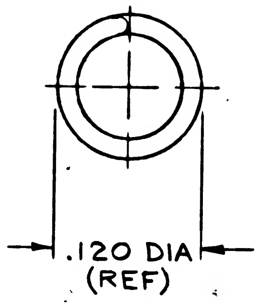
SCALE 4/1 | WEIGHT | CALC ACTUAL | SHEET 1 OF 1

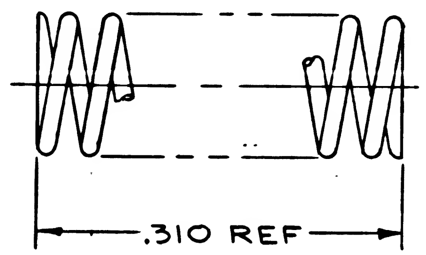
1022639 A

AD-1340

NOTES:
1. INTERPRET DRAWING PER MIL-D-70327.
2. GENERAL MACHINING STANDARDS PER ND1002078.
3. REMOVE BURRS PER ND1002079.
4. FINISH 125 ALL OVER.
5. IDENTIFY USING NASA DWG NO., REVISION LETTER AND MANUFACTURER'S SYMBOL PER ND1002019 (BAGGED).
6. CADMIUM PLATE PER QQ-P-416 TYPE II, CLASS 3.

REVISIONS				
SYM	ZONE	DESCRIPTION	DATE	APPROVAL
–	–	INITIAL RELEASE CLASS A PER TDRR 34290 –	4 AUG 67	





SPRING DATA
WIRE DIA: .016 (STOCK)
OUTSIDE DIA: .120
TOTAL NO. OF COILS: 8 (6 ACTIVE)
DIRECTION OF HELIX: RIGHT OR LEFT HAND
ENDS SQUARED AND GROUND ± 1° OF AXIS.
LOAD AT COMPRESSION LENGTH OF .132 IN. = 14 LB ± 1.4 LB.

ITEM NO.	QTY REQD	SYM	GOVERNMENT/NASA NO.	KOLLSMAN PART NO.	CODE IDENT	NOMENCLATURE OR DESCRIPTION	MATERIAL	SPECIFICATION	UNIT WT

LIST OF PARTS AND MATERIALS

NEXT ASSY	USED ON
1022788	1019984

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOL ON: FRACTIONS ± ~ ; DECIMALS ±.005 ; ANGLES ± ~
DO NOT SCALE THIS DRAWING
MATERIAL: MUSIC WIRE FED. SPEC. QQ-W-470
CONTRACT: NAS 9-497

KOLLSMAN INSTRUMENT CORPORATION
ELMHURST NEW YORK
KIC PN 03386912384
DRAWN J.J. TODD DATE 5-24-67
CHECKED H. BORENSTEIN 6-7-67
APPROVAL 6-9-67
APPROVAL
NASA APPPOVAL 6-29-67
MIT APPROVAL 6-18-67

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

TITLE
SPRING
COMPRESSION

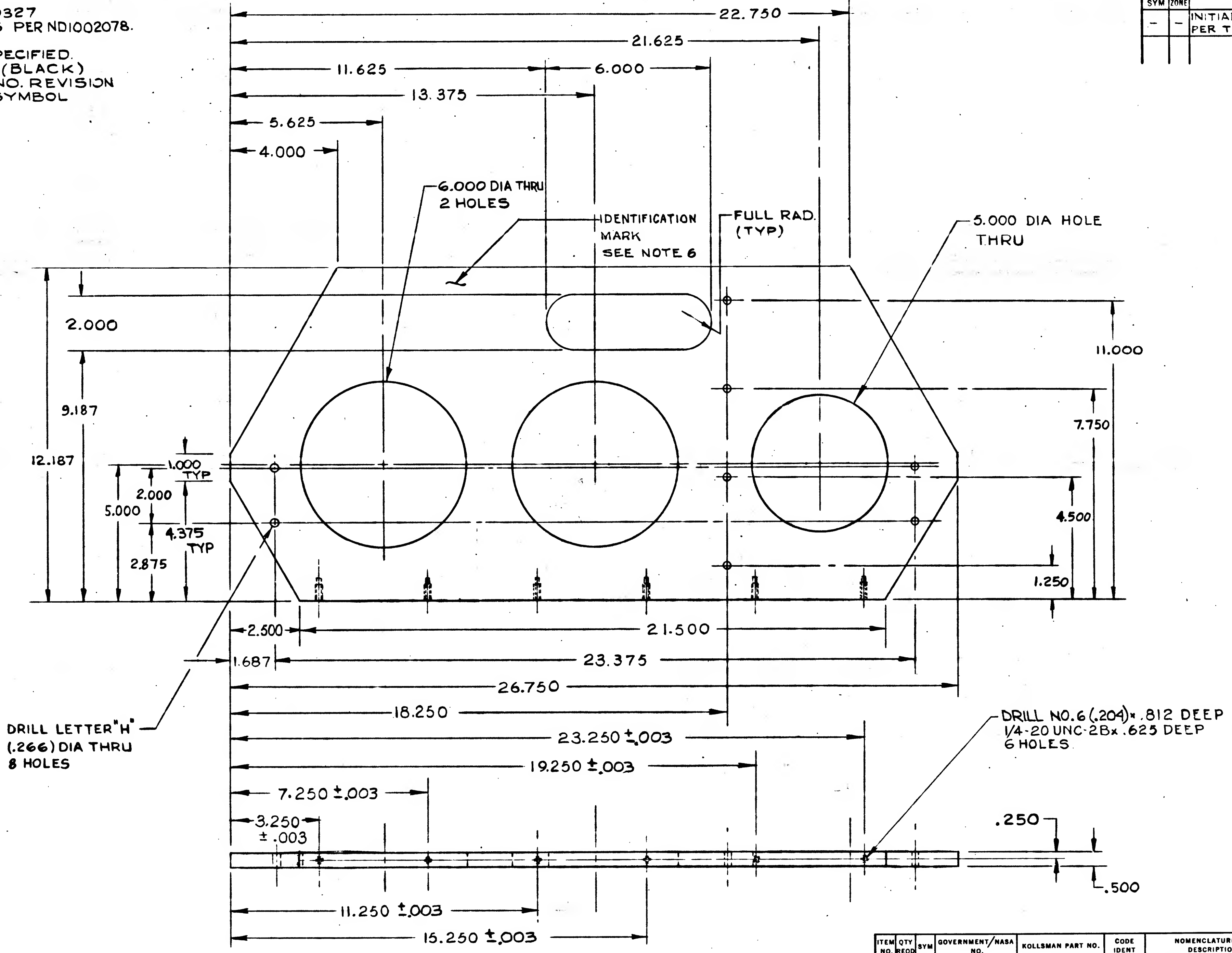
CODE IDENT NO. 89944
SIZE C
NASA NUMBER 1022663
SCALE 10/1
WEIGHT CALC ACTUAL
SHEET 1 OF 1

1022663

AD-1340

NOTES:
1. INTERPRET DRAWING PER MIL-D-70327
2. GENERAL MACHINING STANDARDS PER ND1002078.
3. REMOVE BURRS PER ND1002079.
4. FINISH $\overset{125}{\surd}$ UNLESS OTHERWISE SPECIFIED.
5. ANODIZE PER MIL-A-8625 TYPE II (BLACK)
6. IDENTIFY USING NASA DRAWING NO. REVISION LETTER AND MANUFACTURER'S SYMBOL PER ND1002019.

REVISIONS				
SYM	ZONE	DESCRIPTION	DATE	APPROVAL
–	–	INITIAL RELEASE CLASS A PER TDRR 37335	10 FEB 69	



ITEM NO.	QTY REQD	SYM	GOVERNMENT/NASA NO.	KOLLSMAN PART NO.	CODE IDENT	NOMENCLATURE OR DESCRIPTION	MATERIAL	SPECIFICATION	UNIT WT

LIST OF PARTS AND MATERIALS

NEXT ASSY	USED ON
1022676	1900030

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES

TOL ON	FRACTIONS	DECIMALS	ANGLES
	± —	±.005	± 1°

DO NOT SCALE THIS DRAWING

MATERIAL
ALUMINUM ALLOY
2024-T351
FED SPEC QQ-A-250/4
TEMPER T351

CONTRACT
NAS 9-497

KOLLSMAN INSTRUMENT CORPORATION
ELMHURST NEW YORK
KIC
PN

DRAWN R. BLOMBERG DATE 11-12-68
CHECKED 12-2-68
APPROVAL
MIT APPROVAL G. McSweeney (E.T.)
NASA APPROVAL
MIT APPROVAL

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

TITLE
PLATE, SIDE

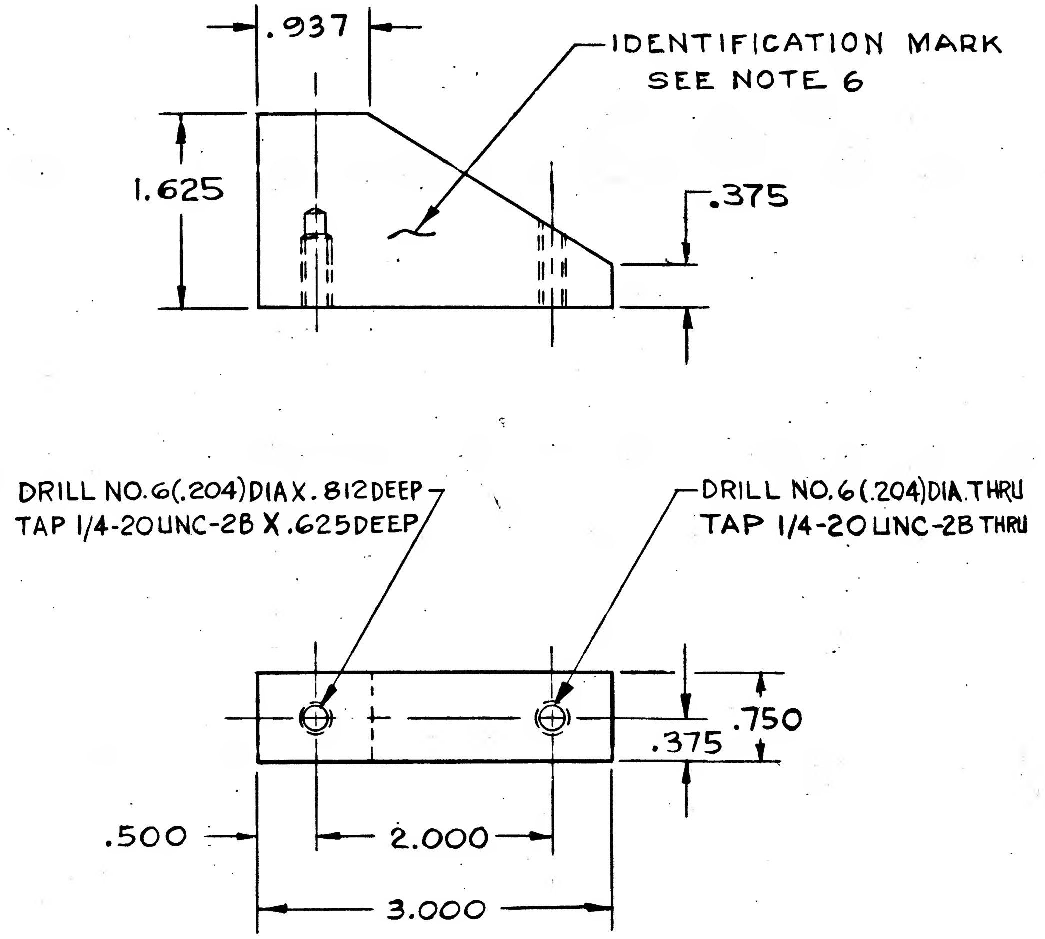
CODE IDENT NO.	SIZE	NASA NUMBER
89944	D	1022671

SCALE 1/2 WEIGHT CALC ACTUAL SHEET 1 OF 1

1022671

NOTES:
1. INTERPRT DRAWING PER MIL-D-70327.
2. GENERAL MACHINING STANDARDS PER ND 1002078.
3. REMOVE BURRS PER ND1002079
4. FINISH 125/ UNLESS OTHERWISE SPECIFIED.
5. ANODIZE PER MIL-A-8625 TYPE II (BLACK)
6. IDENTIFY USING NASA DRAWING NO. REVISION LETTER AND MANUFACTURER'S SYMBOL PER ND100[illegible]9.

REVISIONS				
SYM	ZONE	DESCRIPTION	DATE	APPROVAL
—	—	INITIAL RELEASE CLASS A PER TDRR 37335	10 FEB 69	[illegible]



.937
IDENTIFICATION MARK SEE NOTE 6
1.625
.375
DRILL NO.6(.204)DIA X .812 DEEP
TAP 1/4-20UNC-2B X .625 DEEP
DRILL NO.6(.204)DIA.THRU
TAP 1/4-20UNC-2B THRU
.750
.375
.500
2.000
3.000

ITEM NO.	QTY REQD	SYM	GOVERNMENT/NASA NO.	KOLLSMAN PART NO.	CODE IDENT	NOMENCLATURE OR DESCRIPTION	MATERIAL	SPECIFICATION	UNIT WT

LIST OF PARTS AND MATERIALS

1022676	1900030
NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES

TOL ON	FRACTIONS	DECIMALS	ANGLES
	± #	±.005	± #

DO NOT SCALE THIS DRAWING
MATERIAL
ALUMINUM ALLOY 2024-T351
FED. SPEC QQ-A-250/4, TEMPER T351
CONTRACT
NAS9-497

KOLLSMAN INSTRUMENT CORPORATION
ELMHURST NEW YORK
KIC PN
DRAWN L. BAROUTA DATE 11-18-68
CHECKED B. Rosenbaum 12-2-68
APPROVAL W. Aquin 12-2-68
APPROVAL G. McWeeney (EC9)
NASA APPROVAL
MIT APPROVAL [illegible] 27 Jan 69

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS
TITLE
PAD, SIDE

CODE IDENT NO.	SIZE	NASA NUMBER
89944	C	1022673

SCALE 1:1 WEIGHT CALC ACTUAL SHEET 1 OF 1

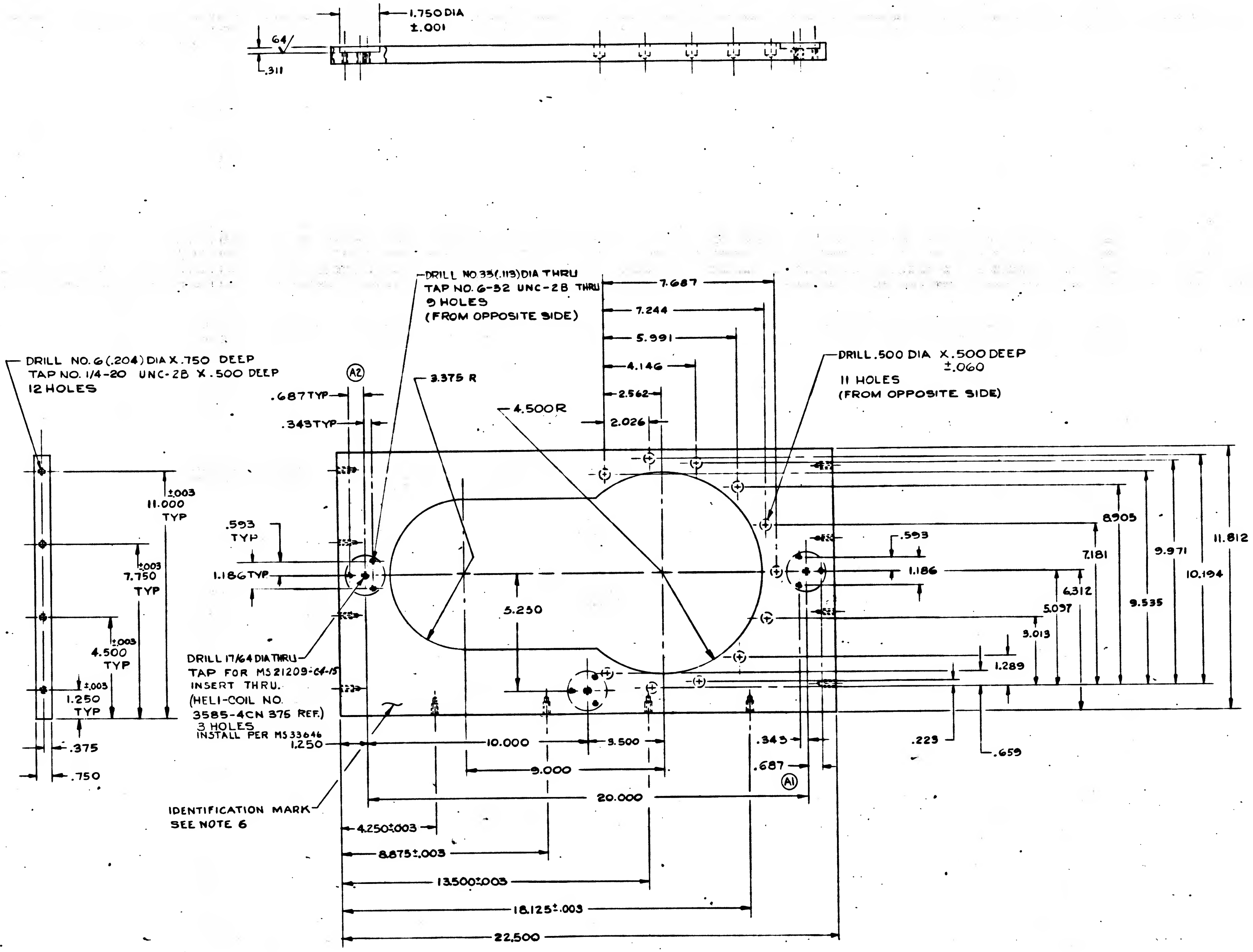
1022673 B

AD-1340

K+E ARKWRIGHT TRACING CLOTH

NOTES:
1. INTERPRET DRAWING PER MIL-D-70327
2. GENERAL MACHINING STANDARDS PER ND 1002078
3. REMOVE BURRS PER ND 1002079.
4. FINISH 125/ UNLESS OTHERWISE SPECIFIED.
5. ANODIZE PER MIL-A-8625 TYPE II (BLACK)
6. IDENTIFY USING NASA DRAWING NO. REVISION LETTER AND MANUFACTURER'S SYMBOL PER ND 1002019.

REVISIONS				
SYM	ZONE	DESCRIPTION	DATE	APPROVAL
		INITIAL RELEASE CLASS A PER TDRR 37335		
A2	D5 D7	REVISED PER ECO 129863 TDRR G37461 DATE 3/28/69	4/26/69	



1.750 DIA ±.001
64/
.311
DRILL NO.33(.113) DIA THRU TAP NO. 6-32 UNC-2B THRU 9 HOLES (FROM OPPOSITE SIDE)
7.687
7.244
5.991
4.146
2.562
2.026
DRILL .500 DIA X .500 DEEP ±.060 11 HOLES (FROM OPPOSITE SIDE)
DRILL NO. 6 (.204) DIA X .750 DEEP TAP NO. 1/4-20 UNC-2B X .500 DEEP 12 HOLES
A2
.687 TYP
.343 TYP
3.375 R
4.500 R
±.003 11.000 TYP
±.003 7.750 TYP
±.003 4.500 TYP
±.003 1.250 TYP
.375
.750
.593 TYP
1.186 TYP
5.250
.593
1.186
8.905
7.181
6.312
5.037
3.013
1.289
9.971
9.535
10.194
11.812
DRILL 17/64 DIA THRU TAP FOR MS21209-C4-15 INSERT THRU. (HELI-COIL NO. 3585-4CN 375 REF.) 3 HOLES INSTALL PER MS33646
1.250
10.000
3.500
9.000
.343
.687
A1
.223
.659
20.000
IDENTIFICATION MARK SEE NOTE 6
4.250±.003
8.875±.003
13.500±.003
18.125±.003
22.500

ITEM NO.	QTY REQD	SYM	GOVERNMENT/NASA NO.	KOLLSMAN PART NO.	CODE IDENT	NOMENCLATURE OR DESCRIPTION	MATERIAL	SPECIFICATION	UNIT WT

LIST OF PARTS AND MATERIALS

NEXT ASSY	USED ON
1022676	1900030

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOL ON: FRACTIONS ± — DECIMALS ± .005 ANGLES ± —
DO NOT SCALE THIS DRAWING
MATERIAL
ALUMINUM ALLOY 2024 - T351 FED SPEC QQ-A-250/4, TEMPER T351
CONTRACT
NAS 9-497

KOLLSMAN INSTRUMENT CORPORATION
ELMHURST NEW YORK
KIC PN
DRAWN L. BAROUTAS DATE 11-15-68
CHECKED 12-2-68
APPROVAL
MIT APPROVAL
NASA APPROVAL
MIT APPROVAL

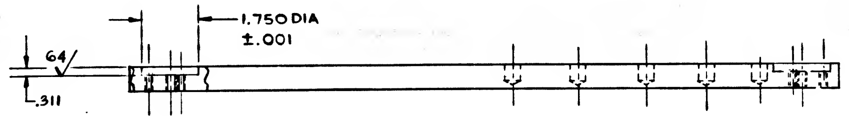
MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

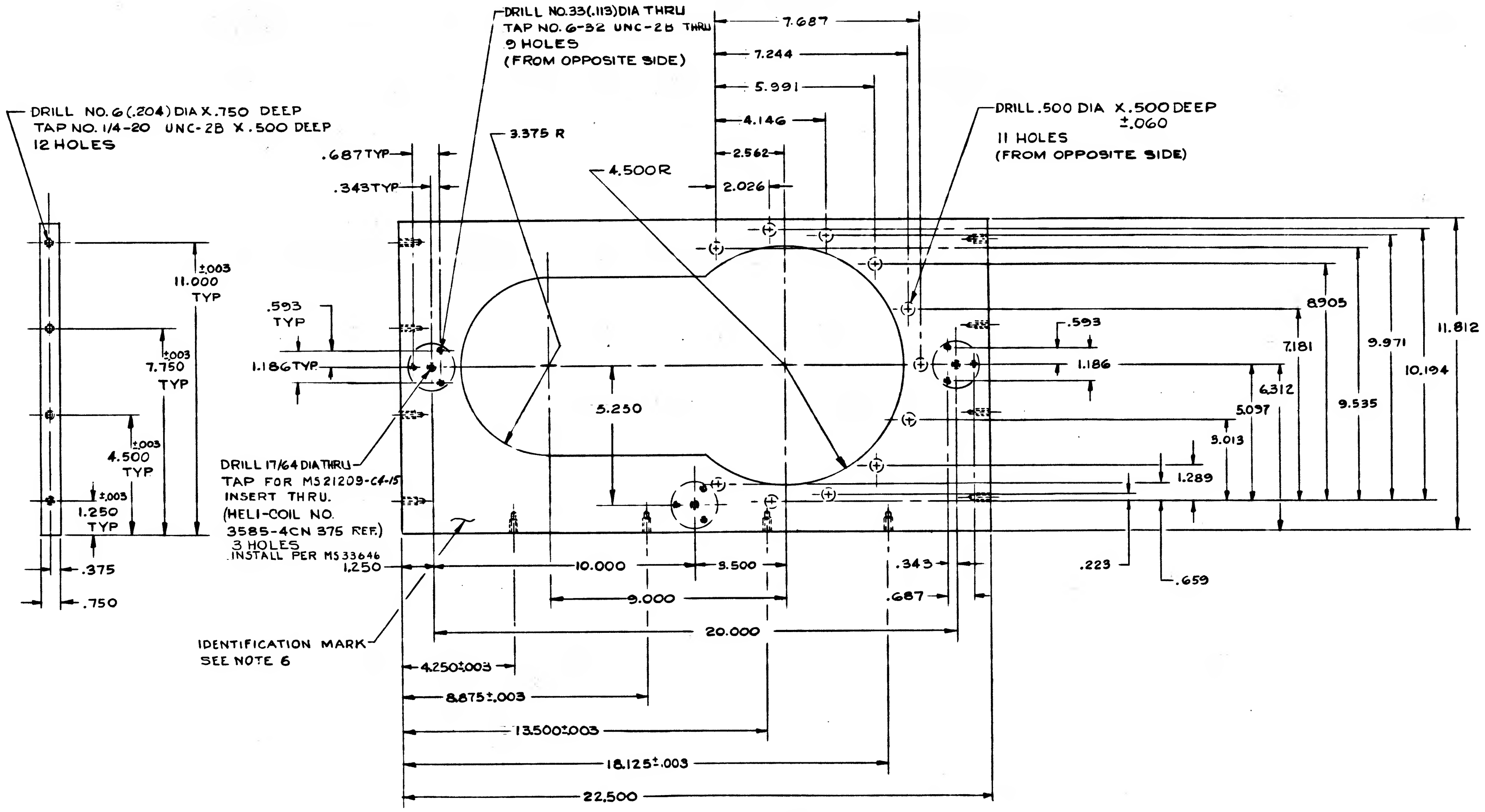
TITLE
PLATE, MOUNTING

CODE IDENT NO. 89944
SIZE E
NASA NUMBER 1022675
SCALE 1/2
WEIGHT
CALC ACTUAL
SHEET 1 OF 1

NOTES:
1. INTERPRET DRAWING PER MIL-D-70327
2. GENERAL MACHINING STANDARDS PER ND 1002078
3. REMOVE BURRS PER ND1002079.
4. FINISH 125/UNLESS OTHERWISE SPECIFIED.
5. ANODIZE PER MIL-A-8625 TYPE II (BLACK)
6. IDENTIFY USING NASA DRAWING NO. REVISION LETTER AND MANUFACTURER'S SYMBOL PER ND 1002019.

REVISIONS				
SYM	ZONE	DESCRIPTION	DATE	APPROVAL
		INITIAL RELEASE CLASS A PER TDRR 37335		





DRILL NO. 6 (.204) DIA X .750 DEEP TAP NO. 1/4-20 UNC-2B X .500 DEEP 12 HOLES
DRILL NO. 33 (.113) DIA THRU TAP NO. 6-32 UNC-2B THRU 9 HOLES (FROM OPPOSITE SIDE)
DRILL .500 DIA X .500 DEEP ±.060 11 HOLES (FROM OPPOSITE SIDE)
DRILL 17/64 DIA THRU TAP FOR MS21209-C4-15 INSERT THRU. (HELI-COIL NO. 3585-4CN 375 REF.) 3 HOLES INSTALL PER MS33646
IDENTIFICATION MARK SEE NOTE 6
3.375 R
4.500 R
.687 TYP
.343 TYP
.593 TYP
1.186 TYP
±.003 11.000 TYP
±.003 7.750 TYP
±.003 4.500 TYP
±.003 1.250 TYP
.375
.750
5.250
7.687
7.244
5.991
4.146
2.562
2.026
1.250
10.000
3.500
9.000
20.000
.343
.687
4.250±.003
8.875±.003
13.500±.003
18.125±.003
22.500
.593
1.186
8.905
7.181
6.312
5.097
3.013
1.289
9.535
9.971
10.194
11.812
.223
.659

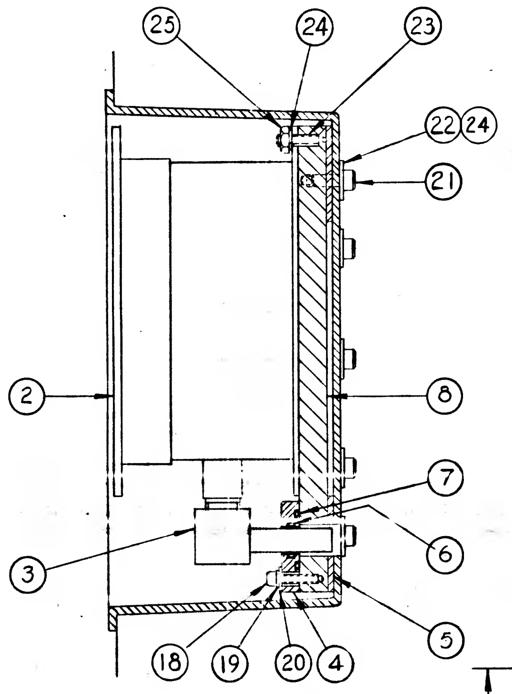
ITEM NO.	QTY REQD	SYM	GOVERNMENT/NASA NO.	KOLLSMAN PART NO.	CODE IDENT	NOMENCLATURE OR DESCRIPTION	MATERIAL	SPECIFICATION	UNIT WT

LIST OF PARTS AND MATERIALS

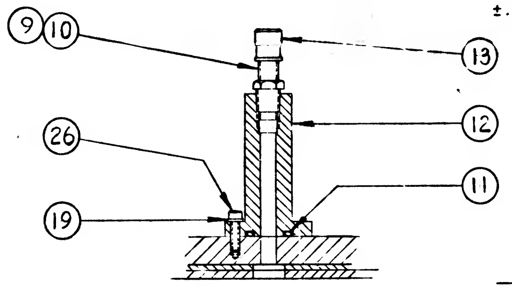
1022676	1900030	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOL ON: FRACTIONS ± — DECIMALS ±.005 ANGLES ± — DO NOT SCALE THIS DRAWING	KOLLSMAN INSTRUMENT CORPORATION ELMHURST NEW YORK KIC PN	MANNED SPACECRAFT CENTER HOUSTON, TEXAS
NEXT ASSY	USED ON	MATERIAL ALUMINUM ALLOY 2024-T351 FED SPEC QQ-A-250/4, TEMPER T351	DRAWN L. BAROUTAS DATE 11-15-68 CHECKED 12-2-68 APPROVAL MIT APPROVAL NASA APPROVAL	TITLE PLATE, MOUNTING
APPLICATION		CONTRACT NAS 9-497	MIT APPROVAL	CODE IDENT NO. 89944 SIZE E NASA NUMBER 1022675 SCALE 1/2 WEIGHT CALC ACTUAL SHEET 1 OF 1

NOTES.
1 INTERPRET DRAWING IN ACCORDANCE WITH MIL-D-70327.
2 CEMENT ITEM NO ㊱ TO ITEM NO ① PER MIL-A-5092, TYPE III AS SHOWN.
3 MARK AT ASSEMBLY "OUA STORAGE CONTAINER" AND PART NUMBER PER ND1002019.

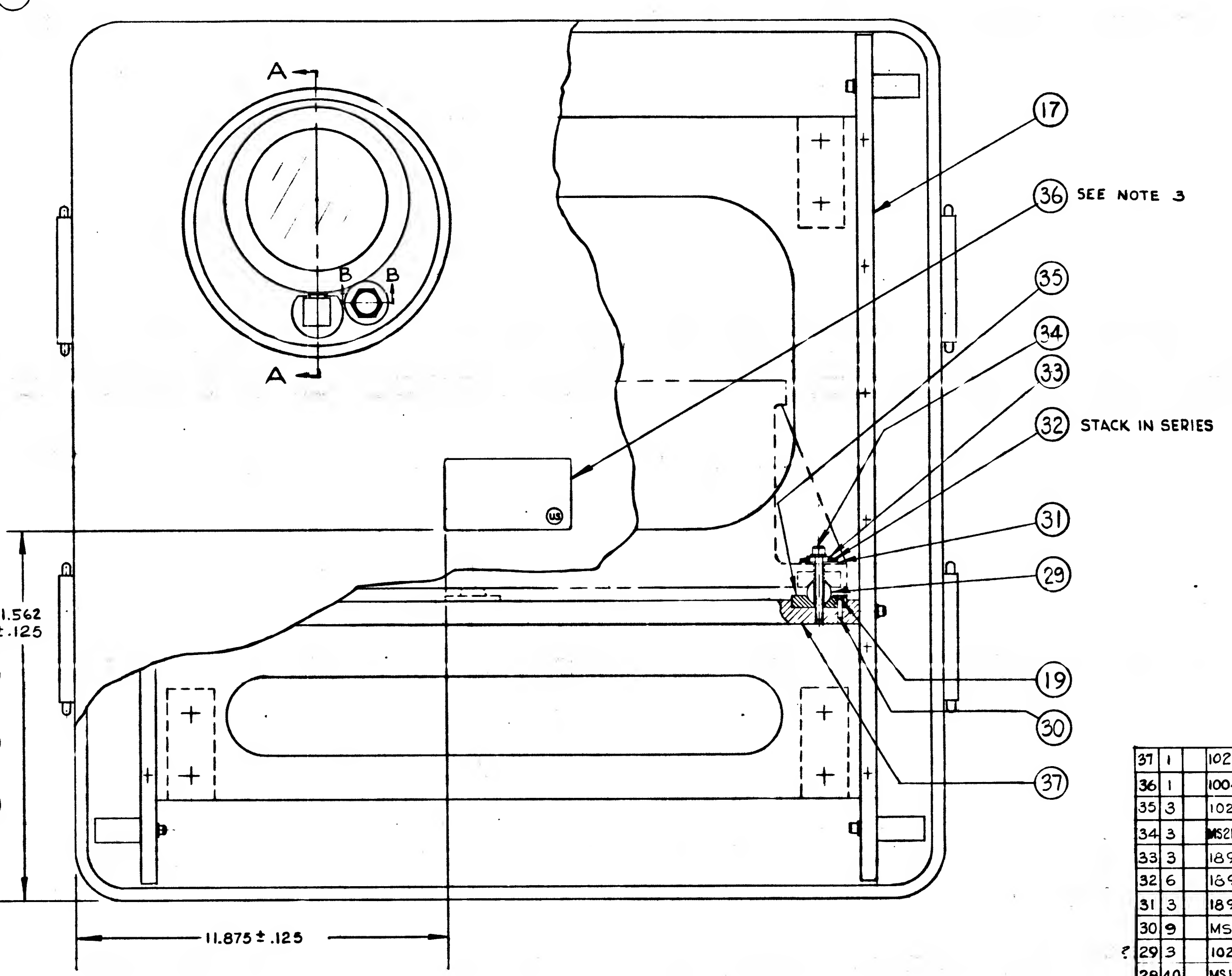
REVISIONS				
SYM	ZONE	DESCRIPTION	DATE	APPROVAL
		INITIAL RELEASE CLASS A PER TDRR 37335	10 Feb 69	

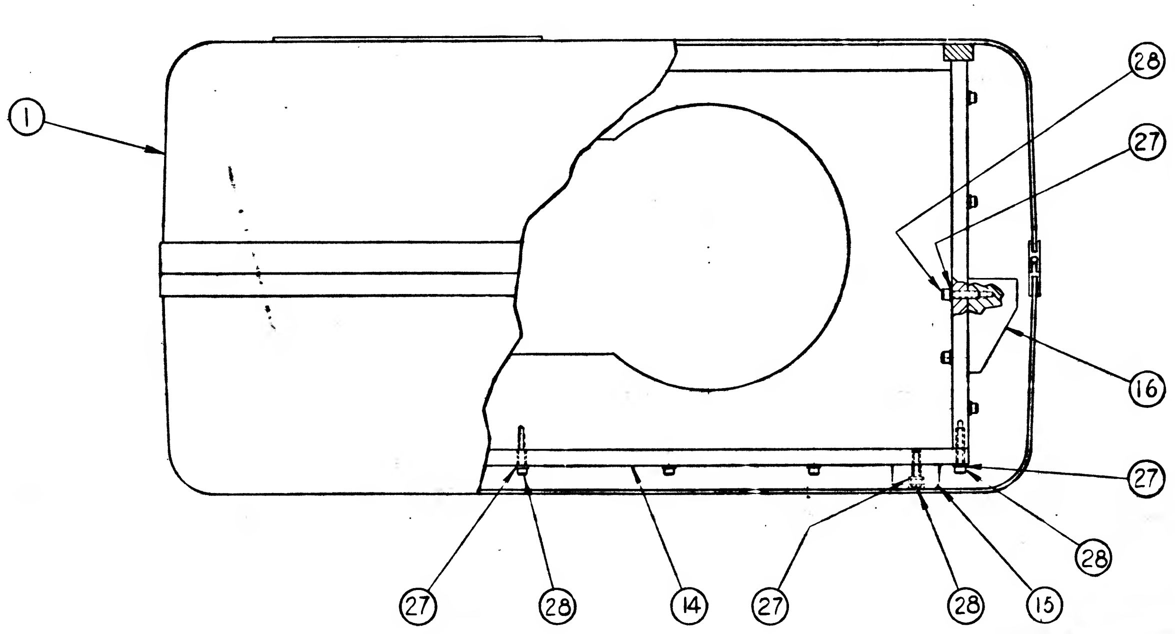


SECTION A-A
FULL SCALE



SECTION B-B
FULL SCALE





ITEM NO.	QTY REQD	SYM	GOVERNMENT/NASA NO.	KOLLSMAN PART NO.	CODE IDENT	NOMENCLATURE OR DESCRIPTION	MATERIAL	SPECIFICATION	UNIT WT
37	1		1022675			PLATE, MOUNTING			
36	1		1004260-307			NAMEPLATE, APOLLO G&N			
35	3		1022678			INSERT, BALL			
34	3		MS21250-04028			BOLT, 12 POINT, EXT. WRENCHING			
33	3		1899976			COLLAR, CENTERING			
32	6		1899979			WASHER, SPRING, BELLEVILLE			
31	3		1899977			WASHER			
30	9		MS16995-17			SCREW CAP SOCKET HEAD			
29	3		1022679			BALL, MOUNTING (NYLON)			
28	40		MS16995-52			SCREW, CAP, SOCKET HEAD			
27	40		MS35338-82			LOCKWASHER			
26	3		MS16995-18			SCREW, CAP, SOCKET HEAD			
25	3		MS35649-104			NUT, PLAIN, HEXAGON			
24	13		MS35338-81			LOCKWASHER			
23	3		MS35249-72			SCREW, FLAT HEAD			
22	10		MS15795-808			WASHER, FLAT			
21	10		MS16995-36			SCREW, CAP, SOCKET HEAD			
20	3		MS15795-806			WASHER, FLAT			
19	15		MS35338-79			LOCKWASHER			
18	3		MS16995-19			SCREW, CAP, SOCKET HEAD			
17	2		1022671			PLATE, SIDE			
16	4		1022673			PAD, SIDE			
15	4		1022674			PAD, BOTTOM			
14	1		1022672			PLATE, BOTTOM			
13	1		MS20813-1			CAP, VALVE			
12	1		1022666			HOUSING, VALVE			
11	1		MS28775-113			O RING			
10	1		MS51607-1			VALVE STEM, PURGING			
9	1		MS51377-2			VALVE CORE, PNEUMATIC TIRE			
8	1		1022670			PLATE, BASE			
7	1		MS28775-116			O RING			
6	1		MS28775-110			O RING			
5	1		1022667			GASKET			
4	1		1022668			PLATE, PRESSURE SEAL			
3	1		1022669			COUPLING, PRESSURE GAUGE			
2	1	*	1001932			LOW PRESSURE GAUGE			
1	1	*	1001931			CASE, STORAGE			

LIST OF PARTS AND MATERIALS

* PURCHASE ITEM SEE SOURCE CONTROL OR SPECIFICATION CONTROL DWG.

NEXT ASSY	USED ON
	1900030

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOL ON: FRACTIONS ± — DECIMALS ± — ANGLES ± —
DO NOT SCALE THIS DRAWING
MATERIAL —
CONTRACT NAS 9-497

KOLLSMAN INSTRUMENT CORPORATION
ELMHURST NEW YORK
KIC PN
DRAWN W. CLARK DATE 11-29-68
CHECKED 12-3-68
APPROVAL 12-5-68
MIT APPROVAL G. McKenney (ECT)
NASA APPROVAL
MIT APPROVAL

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

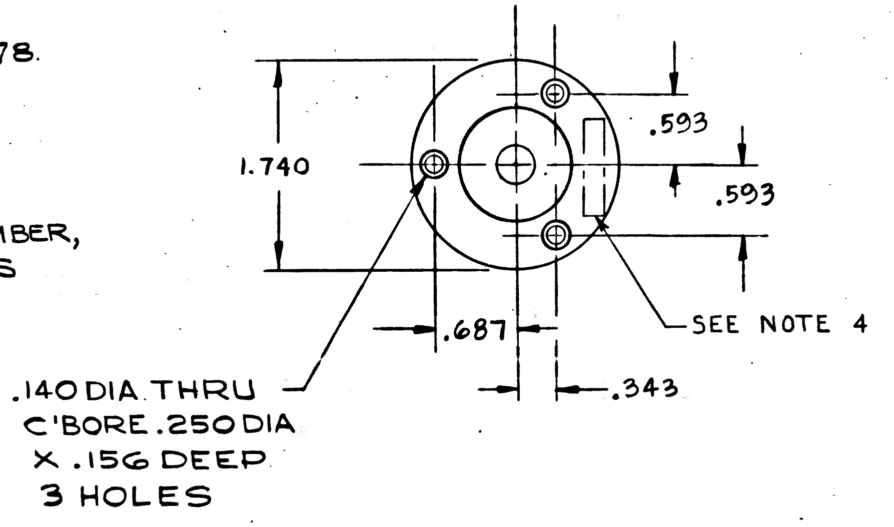
TITLE
OUA CONTAINER ASSEMBLY, STORAGE

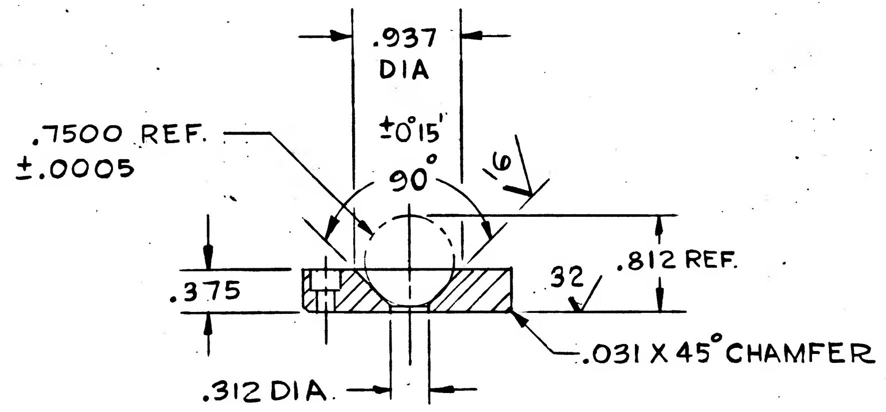
CODE IDENT NO. 89944
SIZE E
NASA NUMBER 1022676
SCALE 1/2/1:1
WEIGHT CALC ACTUAL
SHEET 1 OF 1

REVISIONS				
SYM	ZONE	DESCRIPTION	DATE	APPROVAL
–		INITIAL RELEASE CLASS A PER TDRR 37335	10 FEB 69	GAH

NOTES:

1. INTERPRET DWG IN ACCORDANCE WITH MIL-D-70327.
2. A: GENERAL MACHINING STANDARDS IN ACCORDANCE WITH ND1002078.
   B: REMOVE BURRS IN ACCORDANCE WITH ND 1002079.
3. FINISH 63 UNLESS OTHERWISE SPECIFIED.
4. IDENTIFY USING NASA DRAWING NUMBER, REVISION LETTER, AND MANUFACTURERS SYMBOL PER ND 1002019.
5. FINISH: PASSIVATE PER MIL-STD-171, FINISH NUMBER 5.4.1.





1022678

ITEM NO.	QTY REQD	SYM	GOVERNMENT/NASA NO.	KOLLSMAN PART NO.	CODE IDENT	NOMENCLATURE OR DESCRIPTION	MATERIAL	SPECIFICATION	UNIT WT

LIST OF PARTS AND MATERIALS

1022676	1900030
NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES

TOL ON	FRACTIONS	DECIMALS	ANGLES
	± —	±.005	± 1°

DO NOT SCALE THIS DRAWING

MATERIAL
CORR. RESISTING STEEL
QQ-S-764, CLASS 303
COND. A

CONTRACT
NAS 9-497

KOLLSMAN INSTRUMENT CORPORATION
ELMHURST NEW YORK
KIC
PN

DRAWN L. BAROUTAS DATE 12-4-68
CHECKED L K Prescott 12-4-68
APPROVAL 12-4-68
MIT APPROVAL G. McWeeny (Ect)
NASA APPROVAL
MIT APPROVAL 29 Jan 69

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

TITLE
INSERT, BALL

CODE IDENT NO.	SIZE	NASA NUMBER
89944	C	1022678

SCALE 1:1 WEIGHT CALC ACTUAL SHEET 1 OF 1

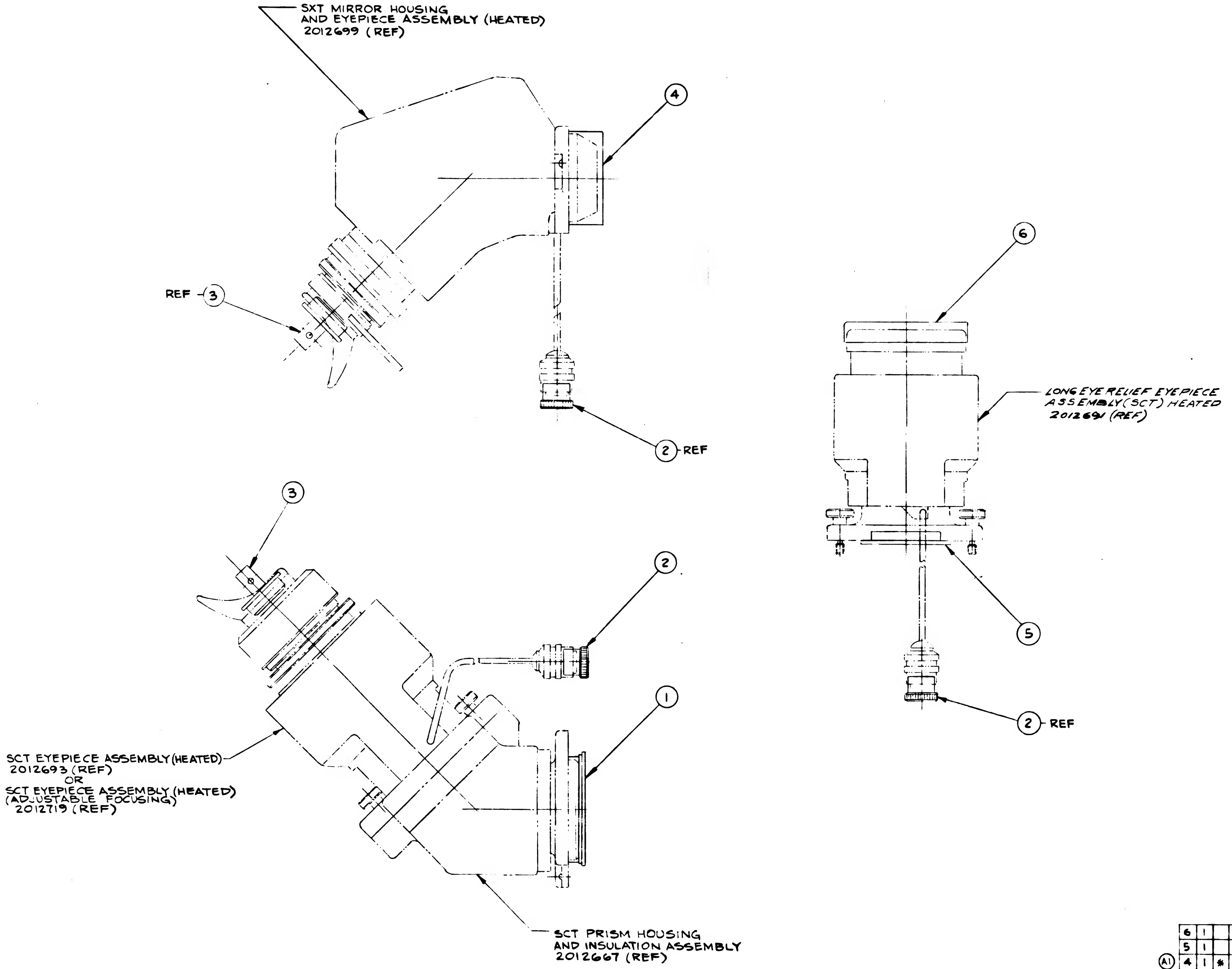
AD-1340

K+E ALBANENE

NOTE

1. INTERPRET DRAWING PER MIL-D-70327.

REVISIONS				
SYM	ZONE	DESCRIPTION	DATE	APPROVAL
(M) —	—	INITIAL RELEASE CLASS A PER TORR 27297		
A1	B3	REVISED PER TORR G27624 DATE 3/29/66	4-7-66 AJP	BJR 4/8/66



ITEM NO	QTY REQD	SYM	GOVERNMENT/NASA NO.	KOLLSMAN PART NO.	CODE IDENT	NOMENCLATURE OR DESCRIPTION	MATERIAL	SPECIFICATION	UNIT WT
6	1		1022335	03386911329		COVER, LENS (LONG EYE RELIEF SCT)			
5	1		1022334	03386911328		COVER, LENS (LONG EYE RELIEF SCT)			
(A1) 4	1	*	1001886-003			COVER, LENS			
3	2		1022332	03386911326		COVER, LENS (SXT AND SCT EYEPIECE)			
2	3	*	1001926-001	03386912144		CAP, PROTECTIVE			
1	1		1022628	03386912139		COVER, LENS (ALTERED COML STANDARD)			

LIST OF PARTS AND MATERIALS

* VENDOR ITEM - SEE SPECIFICATION CONTROL DRAWING BEFORE ORDERING

NEXT ASSY	USED ON
1022980	

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOL ON FRACTIONS ± — DECIMALS ± — ANGLES ± —
DO NOT SCALE THIS DRAWING
MATERIAL —
CONTRACT NAS9-497

KOLLSMAN INSTRUMENT CORPORATION
ELMHURST NEW YORK
KIC PN 01386910089
DRAWN B. Koslowski DATE 2-28-66
CHECKED B. Kafenski 2-28-66
APPROVAL 3-4-66
APPROVAL
A. C. METZGER
NASA APPROVAL
MIT APPROVAL

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

TITLE
LENS AND PLUG
COVERS SET

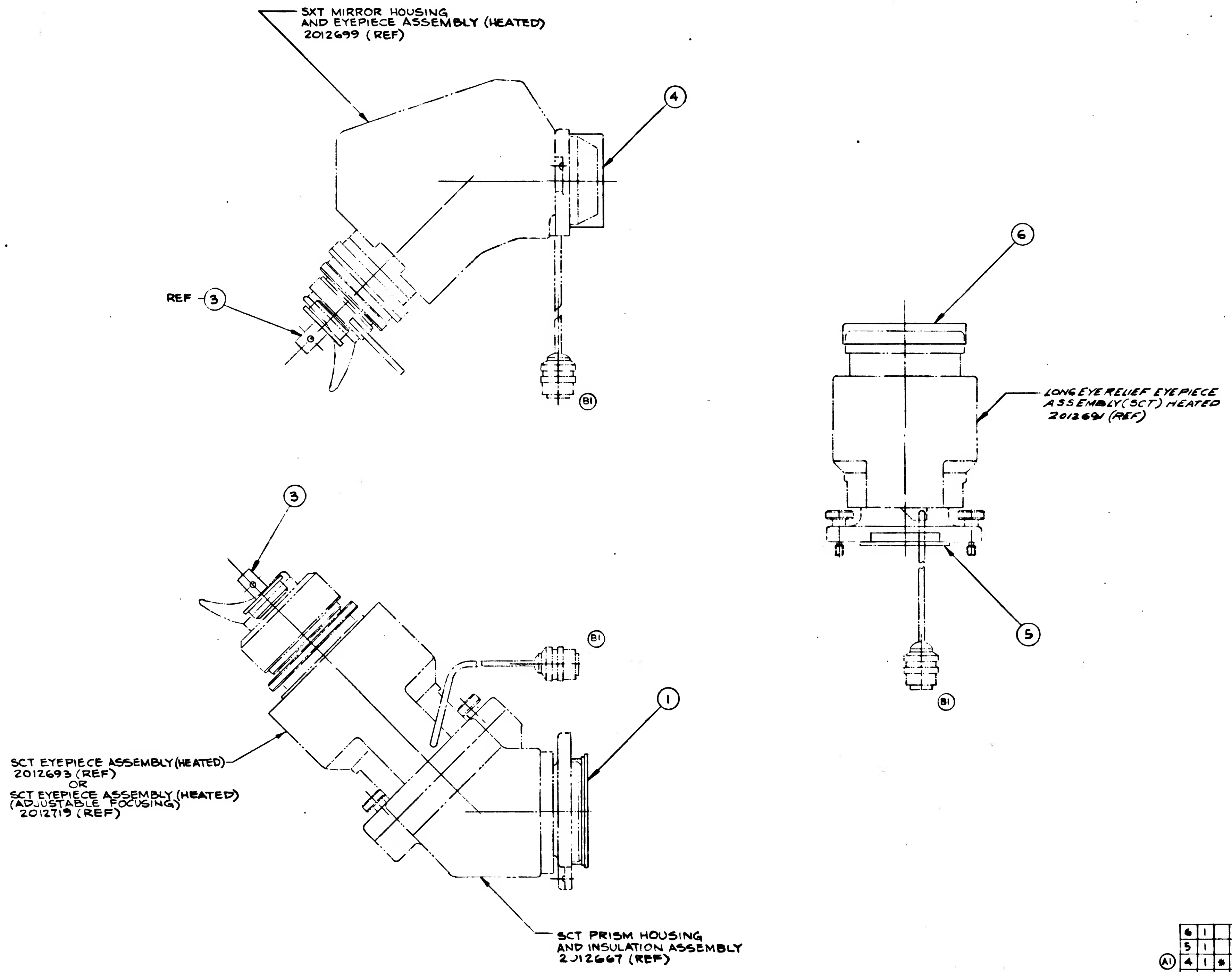
CODE IDENT NO. 89944
SIZE E
NASA NUMBER 1022784
SCALE 1/1
WEIGHT CALC ACTUAL
SHEET 1 OF 1

1022784 A

NOTE

1. INTERPRET DRAWING PER MIL-D-70327.

REVISIONS				
SYM	ZONE	DESCRIPTION	DATE	APPROVAL
—	—	INITIAL RELEASE CLASS A PER TDRR 27297		
A1	B3	REVISED PER TDRR G27624 DATE 3/29/66	4-7-66 AJP	BJK 4/13/66
B2		REVISED PER ECC 115768 TDRR G28787 DATE 5-12-66	5-17-66	


SXT MIRROR HOUSING AND EYEPIECE ASSEMBLY (HEATED) 2012699 (REF)
4
REF 3
B1
6
LONG EYE RELIEF EYEPIECE ASSEMBLY (SCT) HEATED 2012691 (REF)
5
B1
3
B1
1
SCT EYEPIECE ASSEMBLY (HEATED) 2012693 (REF) OR SCT EYEPIECE ASSEMBLY (HEATED) (ADJUSTABLE FOCUSING) 2012719 (REF)
SCT PRISM HOUSING AND INSULATION ASSEMBLY 2012667 (REF)

* VENDOR ITEM - SEE SPECIFICATION CONTROL DRAWING BEFORE ORDERING

	ITEM NO.	QTY REQD	SYM	GOVERNMENT/NASA NO.	KOLLSMAN PART NO.	CODE IDENT	NOMENCLATURE OR DESCRIPTION	MATERIAL	SPECIFICATION	UNIT WT
	6	1		1022335	03386911329		COVER, LENS (LONG EYE RELIEF SCT)			
	5	1		1022334	03386911328		COVER, LENS (LONG EYE RELIEF SCT)			
(A1)	4	1	*	1001886-003			COVER, LENS			
	3	2		1022332	03386911326		COVER, LENS (SXT AND SCT EYEPIECE)			
(B2)	~~2~~	~~3~~	~~*~~	~~1001926-001~~	~~[illegible]~~		~~CAP, PROTECTIVE~~			
	1	1		1022628	03386912139		COVER, LENS (ALTERED COML STANDARD)			

LIST OF PARTS AND MATERIALS

NEXT ASSY	1022980
USED ON	
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOL ON: FRACTIONS ± ~ DECIMALS ± ~ ANGLES ± ~
DO NOT SCALE THIS DRAWING
MATERIAL ~
CONTRACT NAS9-497

KOLLSMAN INSTRUMENT CORPORATION
ELMHURST NEW YORK
KIC PN 01386910089
DRAWN B. Kalowski DATE 2-28-66
CHECKED B. Kafarski 2-28-66
APPROVAL 3-4-66
APPROVAL
A. C. METZGER
NASA APPROVAL
MIT APPROVAL

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

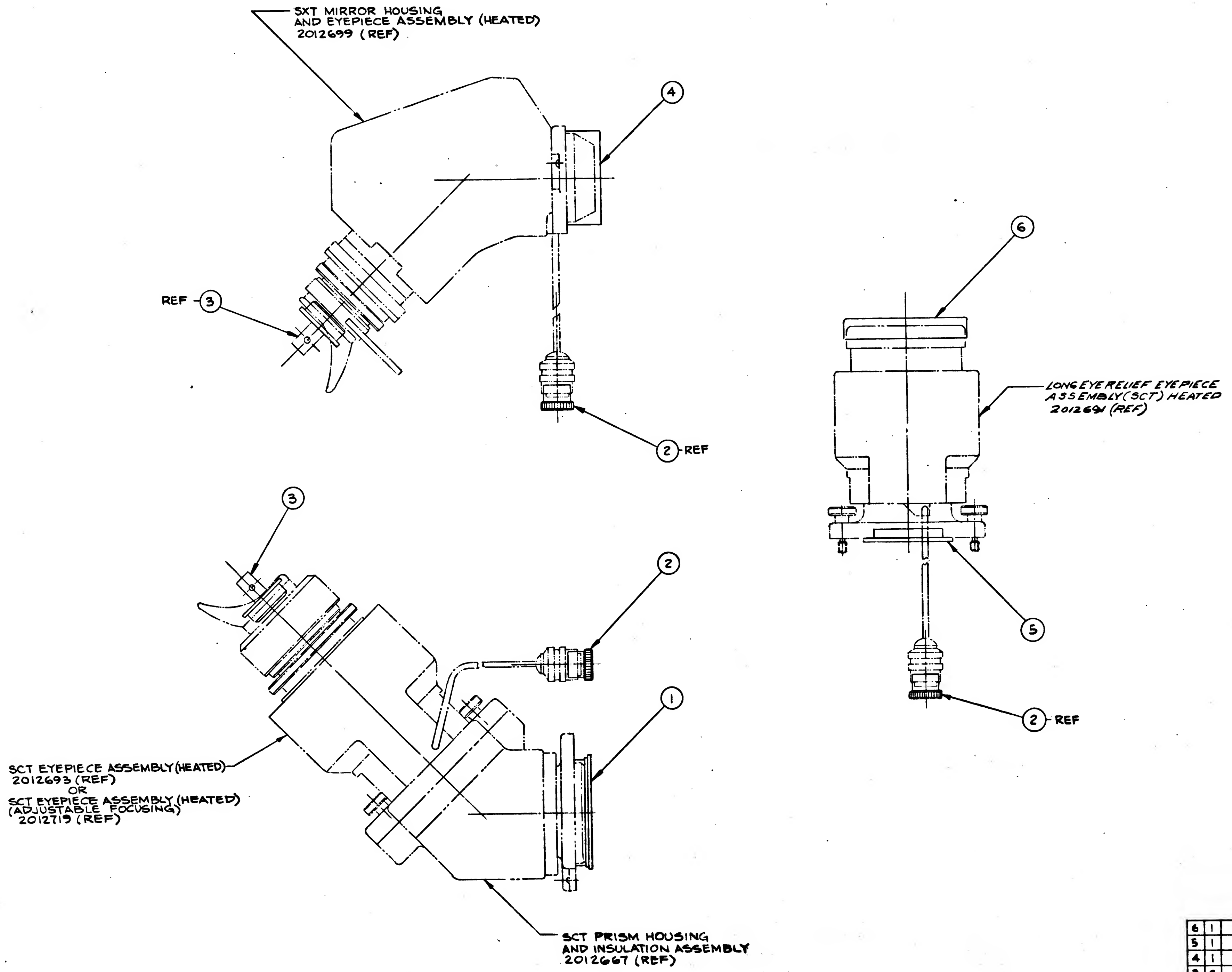
TITLE
LENS AND PLUG COVERS SET

CODE IDENT NO. 89944
SIZE E
NASA NUMBER 1022784
SCALE 1/1
WEIGHT CALC ACTUAL
SHEET 1 OF 1

REVISIONS				
SYM	ZONE	DESCRIPTION	DATE	APPROVAL
—	—	INITIAL RELEASE CLASS A PER TERR 27297		

NOTE

1. INTERPRET DRAWING PER MIL-D-70327.



SXT MIRROR HOUSING AND EYEPIECE ASSEMBLY (HEATED) 2012699 (REF)
4
REF 3
2 REF
6
LONG EYE RELIEF EYEPIECE ASSEMBLY (SCT) HEATED 2012691 (REF)
5
2 REF
3
2
1
SCT EYEPIECE ASSEMBLY (HEATED) 2012693 (REF) OR SCT EYEPIECE ASSEMBLY (HEATED) (ADJUSTABLE FOCUSING) 2012719 (REF)
SCT PRISM HOUSING AND INSULATION ASSEMBLY 2012667 (REF)

✱ VENDOR ITEM - SEE SPECIFICATION CONTROL DRAWING BEFORE ORDERING

MASTER

ITEM NO.	QTY REQD	SYM	GOVERNMENT/NASA NO.	KOLLSMAN PART NO.	CODE IDENT	NOMENCLATURE OR DESCRIPTION	MATERIAL	SPECIFICATION	UNIT WT
6	1		1022335	03386911329		COVER, LENS (LONG EYE RELIEF SCT)			
5	1		1022334	03386911328		COVER, LENS (LONG EYE RELIEF SCT)			
4	1		1022629	03386912140		COVER, LENS			
3	2		1022332	03386911326		COVER, LENS (SXT AND SCT EYEPIECE)			
2	3	✱	1001926-001	03386912144		CAP, PROTECTIVE			
1	1		1022628	03386912139		COVER, LENS (ALTERED COML STANDARD)			

-011

LIST OF PARTS AND MATERIALS

1022980	
NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOL ON FRACTIONS ± ~ DECIMALS ± ~ ANGLES ± ~
DO NOT SCALE THIS DRAWING
MATERIAL ~
CONTRACT NAS9-497

KOLLSMAN INSTRUMENT CORPORATION
ELMHURST NEW YORK
KIC PN 01386910089
DRAWN B. Kolowski DATE 2-28-66
CHECKED [illegible] 2-28-66
APPROVAL [illegible] 3-4-66
APPROVAL
A. C. METZGER
NASA APPROVAL
[illegible] 3/4/66
MIT APPROVAL [illegible]

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

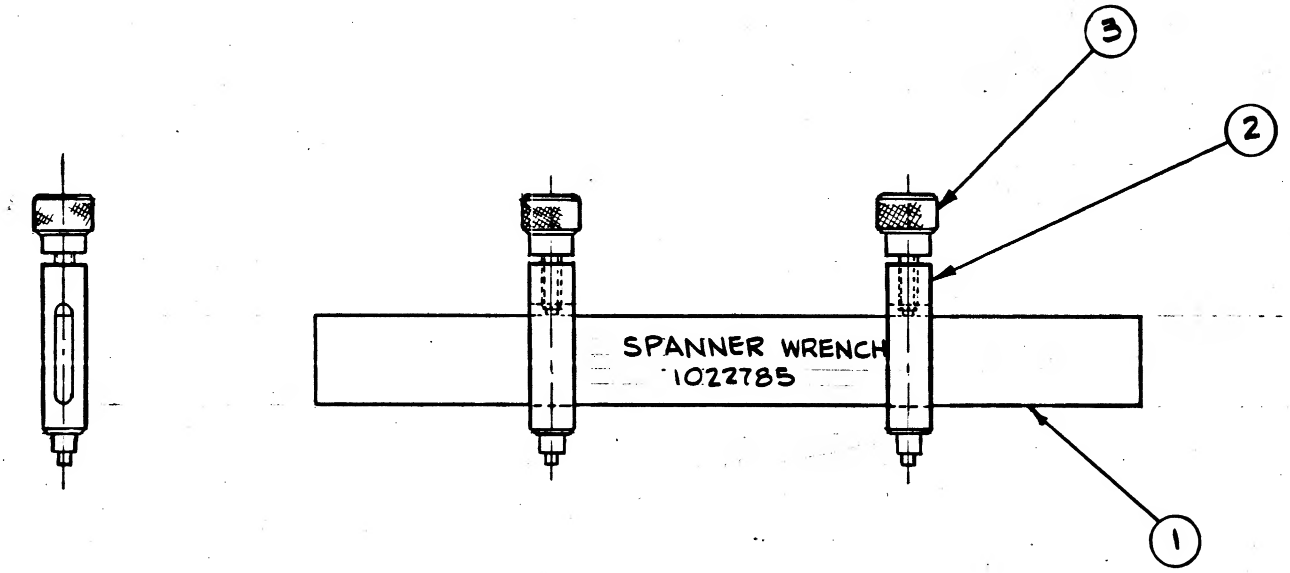
TITLE
LENS AND PLUG COVERS SET

CODE IDENT NO. 89944
SIZE E
NASA NUMBER 1022784
SCALE 1/1
WEIGHT
CALC ACTUAL
SHEET 1 OF 1

1022784

NOTES:
1. INTERPRET DWG PER MIL-D-70327.
2. IDENTIFY USING NASA DWG NO., REVISION LETTER AND MANUFACTURERS SYMBOL PER ND1002019. (BAGGED OR TAGGED).

REVISIONS				
SYM	ZONE	DESCRIPTION	DATE	APPROVAL
—	—	INITIAL RELEASE CLASS A PER TDRR 27665		



ITEM NO.	QTY REQD	SYM	GOVERNMENT/NASA NO.	KOLLSMAN PART NO.	CODE IDENT	NOMENCLATURE OR DESCRIPTION	MATERIAL	SPECIFICATION	UNIT WT
3	2		1022638	03386912143		SCREW, THUMB			
2	2		1022636	03386912141		BARREL			
1	1		1022637	03386912142		BAR, SPANNER			
	-011	LIST OF PARTS AND MATERIALS							

MASTER

NEXT ASSY	USED ON
19100 30	
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOL ON FRACTIONS ± ~ DECIMALS ± ~ ANGLES ± ~
DO NOT SCALE THIS DRAWING
MATERIAL ~
CONTRACT NAS 9-497

KOLLSMAN INSTRUMENT CORPORATION
ELMHURST NEW YORK
KIC PN 02386910600
DRAWN J.P. Demas DATE 2-18-66
CHECKED AJ Peralta 3-10-66
APPROVAL 3-11-66
APPROVAL
NASA APPROVAL A. C. METZGER
MIT APPROVAL 30 Mar 66

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

TITLE
SPANNER WRENCH
(ADJUSTABLE)

CODE IDENT NO. 89944
SIZE C
NASA NUMBER 1022785
SCALE 1/1
WEIGHT CALC ACTUAL
SHEET 1 OF 1

AD-1340

1022785

NOTE:

1. INTERPRET DRAWING PER MIL-D-70327.

REVISIONS				
SYM	ZONE	DESCRIPTION	DATE	APPROVAL
—	—	INITIAL RELEASE CLASS A PER TDRR 28233		
A		REVISED PER ECO 116150 TDRR G 28788 DATE:5-11-66	5-16-66 ALR	AR 5/16/66

1022787 A

* VENDOR ITEM - REFER TO SPECIFICATION CONTROL DRAWING BEFORE ORDERING.

ITEM NO.	QTY REQD	SYM	GOVERNMENT/NASA NO.	KOLLSMAN PART NO.	CODE IDENT	NOMENCLATURE OR DESCRIPTION	MATERIAL	SPECIFICATION	UNIT WT
3	1	*	1001844-5			CAP, PROTECTIVE			
2	1	*	1001844-4			CAP, PROTECTIVE			
1	3	*	1001926-001			CAP, PROTECTIVE			
	-011								

(A1)

LIST OF PARTS AND MATERIALS

NEXT ASSY	USED ON
1900030	

APPLICATION

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOL ON: FRACTIONS ± —; DECIMALS ± —; ANGLES ± —	KOLLSMAN INSTRUMENT CORPORATION ELMHURST NEW YORK KIC PN 03386912191	MANNED SPACECRAFT CENTER HOUSTON, TEXAS	
DO NOT SCALE THIS DRAWING	DRAWN AJ PERALTA DATE 4-15-66 CHECKED B. Ron[illegible] 4/16/66 APPROVAL [illegible] 4/18/66 APPROVAL	TITLE CONNECTOR COVER, PROTECTIVE (OUA)	
MATERIAL	A. C. METZGER NASA APPROVAL G. McGeoyen 4/25/66	CODE IDENT NO. 89944	SIZE C · NASA NUMBER 1022787
CONTRACT NAS 9-497	MIT APPROVAL W. Kupfer 21 April 66	SCALE —	WEIGHT CALC ACTUAL · SHEET 1 OF 1

NOTE:

1. INTERPRET DRAWING PER MIL-D-70327.

REVISIONS				
SYM	ZONE	DESCRIPTION	DATE	APPROVAL
—	—	INITIAL RELEASE CLASS A PER TDRR 28233		

1022787

* VENDOR ITEM - REFER TO SPECIFICATION CONTROL DRAWING BEFORE ORDERING.

ITEM NO.	QTY REQD	SYM	GOVERNMENT/NASA NO.	KOLLSMAN PART NO.	CODE IDENT	NOMENCLATURE OR DESCRIPTION	MATERIAL	SPECIFICATION	UNIT WT
3	1	*	1001844-5			CAP, PROTECTIVE			
2	1	*	1001844-4			CAP, PROTECTIVE			
1	1	*	1001926-001			CAP, PROTECTIVE			
	-011	LIST OF PARTS AND MATERIALS							

MASTER

NEXT ASSY	USED ON
1900030	
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOL ON: FRACTIONS ± —; DECIMALS ± —; ANGLES ± —
DO NOT SCALE THIS DRAWING
MATERIAL
CONTRACT NAS 9-497

KOLLSMAN INSTRUMENT CORPORATION
ELMHURST NEW YORK
KIC PN 03386912191
DRAWN AJ PERALTA DATE 4-15-66
CHECKED B. Ronchi 4/16/66
APPROVAL [illegible] 4/18/66
APPROVAL
A. G. METZGER
NASA APPROVAL G. McLeaney 4/25/66
MIT APPROVAL W. Guffey 21 April 66

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

TITLE CONNECTOR COVER, PROTECTIVE (OUA)

CODE IDENT NO. 89944
SIZE C
NASA NUMBER 1022787
SCALE —
WEIGHT CALC ACTUAL
SHEET 1 OF 1

AD-1340

1022787

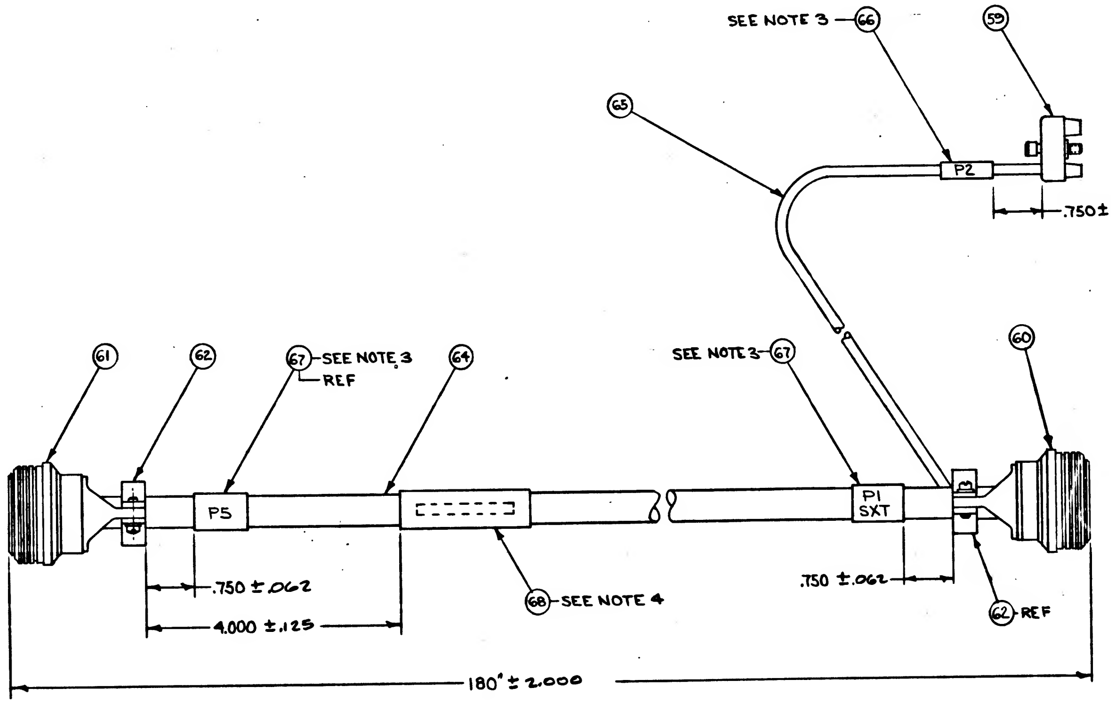
SYM	ZONE	DESCRIPTION	DATE	APPROVAL
REV	—	CLASS A RELEASE PER TDRR 21713		

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH MIL-D-70327
2. WIRE PER ND 1002032
3. MARK PER ND 1002019
4. IDENTIFY USING NASA PT NO; REV LTR, MFRS SYM AND CABLE NO (W313) PER ND 1002019
5. MIL-I-631, TYPE F, FORM U, GRADE C, CLASS I, CATEGORY I, FOR ITEM NO. 64 ID 1"DIA, FOR ITEM 65 ID 1/4DIA COLOR - BLK
6. FOR SHIELDED WIRES, THE OUTER JACKET COLOR PROCEDES THE SLASH, FOLLOWED BY THE INNER CONDUCTOR INSULATION COLOR.
7. WIRE TO CONFORM WITH ND 1002181, EXCEPT FOR SECTION 4 (QUALITY ASSURANCE PROVISIONS)
8. WIRE LENGTH TOLERANCES SHALL BE AS FOLLOWS:

LENGTHS UP TO 1"	±.062
LENGTHS OVER 1" TO 6"	±.125
LENGTHS OVER 6" TO 12"	±.250
LENGTHS OVER 12" TO 36"	±.500
LENGTHS OVER 36" TO 120"	±1.000
LENGTHS OVER 120"	± 2.000

7. CRIMP PER ND1002206.
8. CONDUCTORS SHALL HAVE FERRULES STAGGERED TO PREVENT OVERLAP WHENEVER TWO OR MORE ARE REQD IN ONE BUNDLE



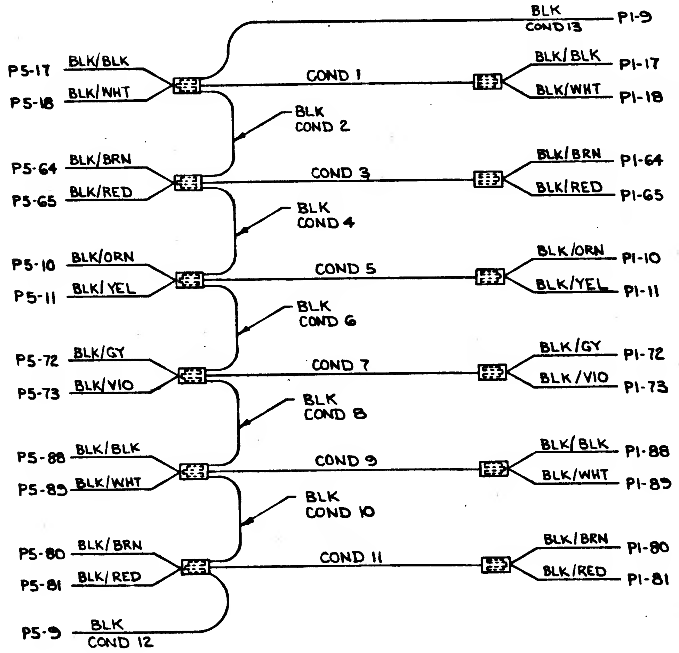


FIG 1

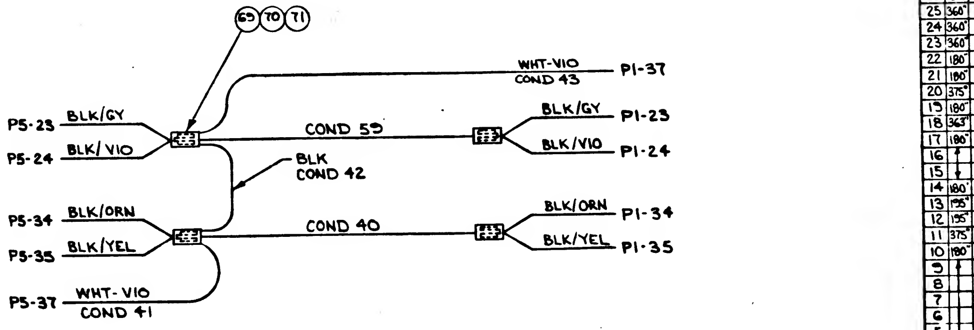


FIG 2

ITEM NO.	QTY REQD	SYM	GOVERNMENT/NASA NO.	KOLLSMAN PART NO.	CODE IDENT	NOMENCLATURE OR DESCRIPTION	MATERIAL	SPECIFICATION	UNIT WT
71	16	*	1001707-9	74094045024		FERRULE (INNER)			
70	16	*	1001711-8	74094045003		FERRULE (OUTER)			
69	16	*	1001732-136	60025035009		INSULATION SLEEVING (5/8" LG)			
68	1	*	1015865-453	60025035063		↑			
67	2	*	1015865-183	60025035063					
66	1	*	1015865-164	60025035055					
65	13"		SEE NOTE 5	60025050008		↓			
64	177"		SEE NOTE 5	60025050005		INSULATION SLEEVING			
63									
62	2	*	1001793-006			CLAMP, CABLE			
61	1	*	1001792-101			CONNECTOR, PLUG			
60	1	*	1001792-201			CONNECTOR, PLUG			
59	1	*	1001791-1			CONNECTOR, PLUG			
58	360"		MIL-W-16878/1822	60521052245		CABLE, ELECTRICAL (BLK/GY, VIO)		SEE NOTE 7	
57	360"		↑	60521052231		↑ (BLK/ORN, YEL)		↑	
56	360"			60521052218		↓ (BLK/BRN, RED)			
55	360"			60521052201		CABLE, ELECTRICAL (BLK/BLK, WHT)			
54	180"			60601052255		WIRE, ELECTRICAL (WHT-VIO-GY)			
53	↑			↑ 2254		↑ (WHT-BLU-GY)			
52				2252		(WHT-GRN-GY)			
51				2251		(WHT-GRN-VIO)			
50				2250		(WHT-GRN-BLU)			
49				2249		(WHT-YEL-GY)			
48				2248		(WHT-YEL-VIO)			
47				2247		(WHT-YEL-BLU)			
46				2246		(WHT-YEL-GRN)			
45				2245		(WHT-ORN-GY)			
44				2244		(WHT-ORN-VIO)			
43	↓			2243		(WHT-ORN-BLU)			
42	180"			2242		(WHT-ORN-GRN)			
41	360"			2241		(WHT-ORN-YEL)			
40	360"			2240		(WHT-RED-GY)			
39	180"			2239		(WHT-RED-VIO)			
38	195"			2238		(WHT-RED-BLU)			
37	180"			2237		(WHT-RED-GRN)			
36	↑			2236		(WHT-RED-YEL)			
35				2235		(WHT-RED-ORN)			
34				2234		(WHT-BRN-GY)			
33				2233		(WHT-BRN-VIO)			
32				2232		(WHT-BRN-BLU)			
31				2231		(WHT-BRN-GRN)			
30	↓			2230		(WHT-BRN-YEL)			
29	180"			2229		(WHT-BRN-ORN)			
28	195"			2228		(WHT-BRN-RED)			
27	180"			2227		(WHT-BLK-GY)			
26	180"			2226		(WHT-BLK-VIO)			
25	360"			2225		(WHT-BLK-BLU)			
24	360"			2224		(WHT-BLK-GRN)			
23	360"			2223		(WHT-BLK-YEL)			
22	180"			2222		(WHT-BLK-ORN)			
21	180"			2221		(WHT-BLK-RED)			
20	375"			2220		(WHT-BLK-BRN)			
19	180"			2219		(WHT-GY)			
18	363"			2218		(WHT-VIO)			
17	180"			2217		(WHT-BLU)			
16	↑			2216		(WHT-GRN)			
15	↓			2215		(WHT-YEL)			
14	180"			2214		(WHT-ORN)			
13	195"			2213		(WHT-RED)			
12	195"			2212		(WHT-BRN)			
11	375"			2211		(WHT-BLK)			
10	180"			2210		(WHT)			
9	↑			2209		(GY)			
8				2208		(VIO)			
7				2207		(BLU)			
6				2206		(GRN)			
5				2205		(YEL)			
4				2204		(ORN)			
3	↓			2203		(RED)			
2	180"		↓	↓ 2202		↓ (BRN)		↓	
1	201"		MIL-W-16878/1822	60601052201		WIRE, ELECTRICAL (BLK)		SEE NOTE 7	
	-011	LIST OF PARTS AND MATERIALS							

* VENDOR ITEM - SEE SOURCE CONTROL OR SPECIFICATION CONTROL DRAWING.

REFERENCE DRAWING
INTERCONNECTION DIAGRAM 1022949

MASTER

NEXT ASSY	USED ON
1016949	1016949
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOL ON: FRACTIONS + — − ; DECIMALS + — − ; ANGLES + — −
DO NOT SCALE THIS DRAWING
MATERIAL
CONTRACT NAS9-497

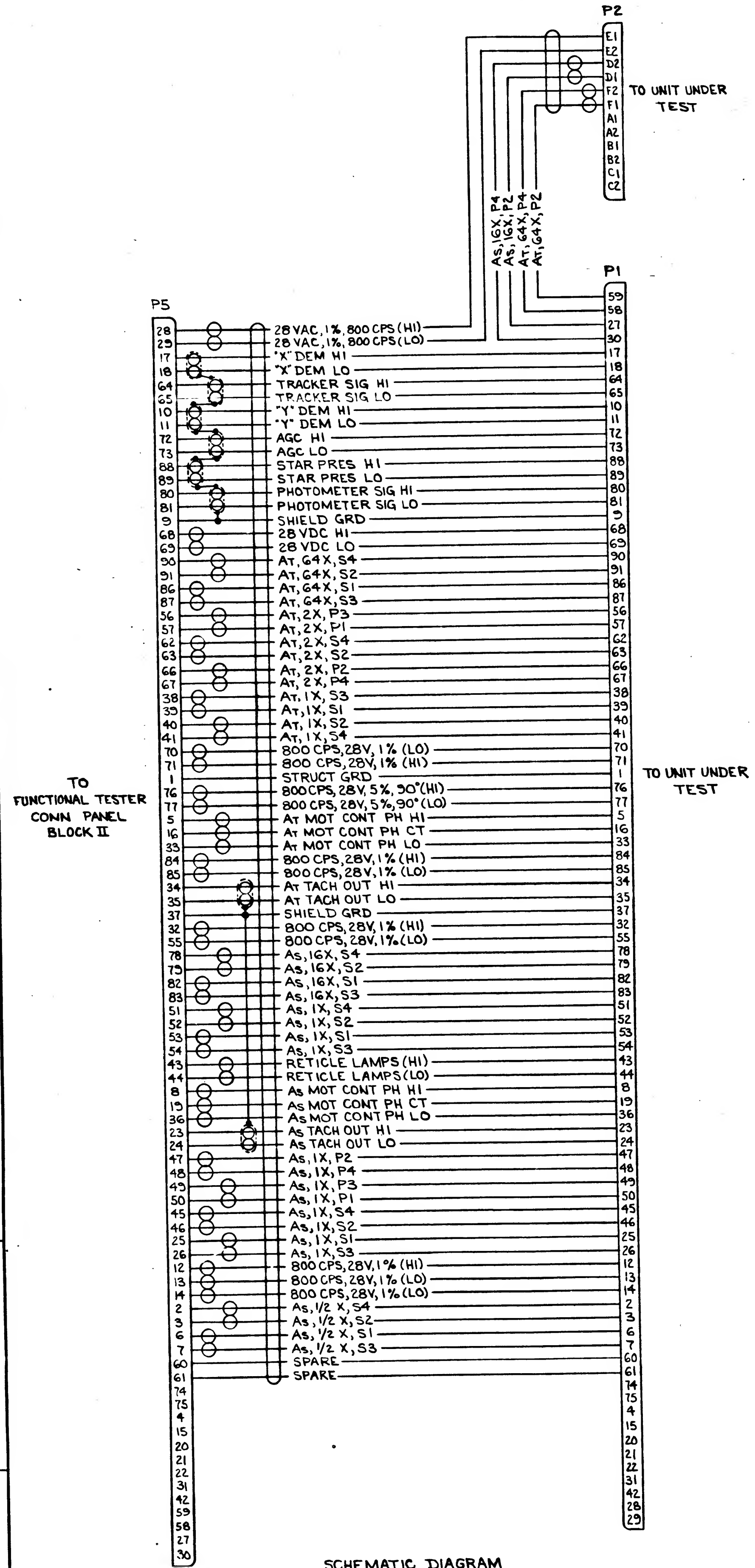
KOLLSMAN INSTRUMENT CORPORATION
ELMHURST NEW YORK
KIC PN 02386910289
DRAWN T. GREGORIO DATE 3-19-65
CHECKED E. E. Schueder 3-19-65
APPROVAL
APPROVAL
NASA APPROVAL
MIT APPROVAL

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

TITLE
CABLE ASSEMBLY, SPECIAL PURPOSE, ELECTRICAL
(W313)

CODE IDENT NO. 89944
SIZE E
NASA NUMBER 1022803
SCALE NONE
WEIGHT CALC ACTUAL
SHEET 1 OF 2

SYM	ZONE	DESCRIPTION	DATE	APPROVAL
REV	-	CLASS A RELEASE PER TDRR 21713		



SCHEMATIC DIAGRAM
W313

	CONDUCTOR					FROM COMPONENT	TO COMPONENT	REFERENCE
	NO.	ITEM NO.	COLOR	LENGTH	ROUTE			
	1	55	BLK/BLK	180"		P5-17	P1-17	SEE FIG 1
			BLK/WHT	180"		P5-18	P1-18	
	2	1	BLK	3"		SHLD COND 1	SHLD COND 3	↑
	3	56	BLK/BRN	180"		P5-64	P1-64	
			BLK/RED	180"		P5-65	P1-65	
	4	1	BLK	3"		SHLD COND 3	SHLD COND 5	
	5	57	BLK/ORN	180"		P5-10	P1-10	
			BLK/YEL	180"		P5-11	P1-11	
	6	1	BLK	3"		SHLD COND 5	SHLD COND 7	
	7	58	BLK/GY	180"		P5-72	P1-72	
			BLK/VIO	180"		P5-73	P1-73	
	8	1	BLK	3"		SHLD COND 7	SHLD COND 9	
	9	55	BLK/BLK	180"		P5-88	P1-88	
			BLK/WHT	180"		P5-89	P1-89	
	10	1	BLK	3"		SHLD COND 9	SHLD COND 11	
	11	56	BLK/BRN	180"		P5-80	P1-80	
			BLK/RED	180"		P5-81	P1-9	
	12	1	BLK	3"		P5-9	SHLD COND 11	↓
	13	1	BLK	180"		SHLD COND 1	P1-9	SEE FIG 1
TWIST	14	2	BRN	↑		P5-68	↑ -68	
	15	3	RED			↑ -69	-69	
TWIST	16	4	ORN			-90	-90	
	17	5	YEL			-91	-91	
TWIST	18	6	GRN			-86	-86	
	19	7	BLU			-87	-87	
TWIST	20	8	VIO			-56	-56	
	21	9	GY			-57	-57	
TWIST	22	10	WHT			-62	-62	
	23	11	WHT-BLK			-63	-63	
TWIST	24	12	WHT-BRN			-66	-66	
	25	13	WHT-RED			-67	-67	
TWIST	26	14	WHT-ORN			-38	-38	
	27	15	WHT-YEL			-39	-39	
TWIST	28	16	WHT-GRN			-40	-40	
	29	17	WHT-BLU			-41	-41	
TWIST	30	18	WHT-VIO			-70	-70	
	31	19	WHT-GY			-71	-71	
	32	20	WHT-BLK-BRN			-1	-1	
TWIST	33	21	WHT-BLK-RED			-76	-76	
	34	22	WHT-BLK-ORN			-77	-77	
TWIST	35	23	WHT-BLK-YEL			-5	-5	
	36	24	WHT-BLK-GRN			-16	-16	
	37	25	WHT-BLK-BLU			-33	-33	
TWIST	38	26	WHT-BLK-VIO			-84	-84	
	39	27	WHT-BLK-GY			-85	-85	
	40	57	BLK/ORN	↓		-34	↓ -34	SEE FIG 2
			BLK/YEL	180"		↓ -35	P1-35	
	41	18	WHT-VIO	3"		P5-37	SHLD COND 40	SEE FIG 2
	42	1	BLK	3"		SHLD COND 40	SHLD COND 59	SEE FIG 2
	43	18	WHT-VIO	180"		SHLD COND 59	P1-37	SEE FIG 2
TWIST	44	28	WHT-BRN-RED	↑		P5-32	↑ -32	
	45	29	WHT-BRN-ORN			↑ -55	-55	
TWIST	46	30	WHT-BRN-YEL			-78	-78	
	47	31	WHT-BRN-GRN			-79	-79	
TWIST	48	32	WHT-BRN-BLU			-82	-82	
	49	33	WHT-BRN-VIO			-83	-83	
TWIST	50	34	WHT-BRN-GY			-51	-51	
	51	35	WHT-RED-ORN			-52	-52	
TWIST	52	36	WHT-RED-YEL			-53	-53	
	53	37	WHT-RED-GRN			-54	-54	
TWIST	54	38	WHT-RED-BLU			-43	-43	
	55	39	WHT-RED-VIO			-44	-44	
TWIST	56	40	WHT-RED-GY			-8	-8	
	57	41	WHT-ORN-YEL			-19	-19	
	58	42	WHT-ORN-GRN			-36	-36	
	59	58	BLK/GY			-23	23	SEE FIG 2
			BLK/VIO			-24	-24	
TWIST	60	43	WHT-ORN-BLU			-47	-47	
	61	44	WHT-ORN-VIO			-48	-48	
TWIST	62	45	WHT-ORN-GY			-49	-49	
	63	46	WHT-YEL-GRN			-50	-50	
TWIST	64	47	WHT-YEL-BLU			-45	-45	
	65	48	WHT-YEL-VIO			-46	-46	
TWIST	66	49	WHT-YEL-GY			-25	-25	
	67	50	WHT-GRN-BLU			-26	-26	
TWIST	68	51	WHT-GRN-VIO			-12	-12	
	69	52	WHT-GRN-GY			-13	-13	
	70	53	WHT-BLU-GY			-14	-14	
TWIST	71	54	WHT-VIO-GY			-2	-2	
	72	23	WHT-BLK-YEL			-3	-3	
TWIST	73	25	WHT-BLK-BLU			-6	-6	
	74	24	WHT-BLK-GRN			-7	-7	
	75	40	WHT-RED-GY	↓		-60	↓ -60	
	76	41	WHT-ORN-YEL	180"		-61	P1-61	
TWIST	77	11	WHT-BLK	195"		↓ -28	P2-E1	
	78	20	WHT-BLK-BRN	195"		P5-29	P2-E2	
TWIST	79	12	WHT-BRN	15"		P2-D2	P1-30	
	80	28	WHT-BRN-RED	15"		↑ D1	↑ -27	
TWIST	81	13	WHT-RED	15"		↓ F2	↓ -58	
	82	38	WHT-RED-BLU	15"		P2-F1	P1-59	

ITEM NO.	QTY REQD	SYM	GOVERNMENT/NASA NO.	KOLLSMAN PART NO.	CODE IDENT	NOMENCLATURE OR DESCRIPTION	MATERIAL	SPECIFICATION	UNIT WT

LIST OF PARTS AND MATERIALS

NEXT ASSY	USED ON
1016949	1016949

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOL ON: FRACTIONS ± — DECIMALS ± — ANGLES ± —
DO NOT SCALE THIS DRAWING
MATERIAL
CONTRACT NAS9-497

KOLLSMAN INSTRUMENT CORPORATION
ELMHURST NEW YORK
KIC PN 02386910289
DRAWN T. GREGORIO DATE 3-17-65
CHECKED E F Schneider 3-17-65
APPROVAL
APPROVAL
NASA APPROVAL A C Metz
M T APPROVAL

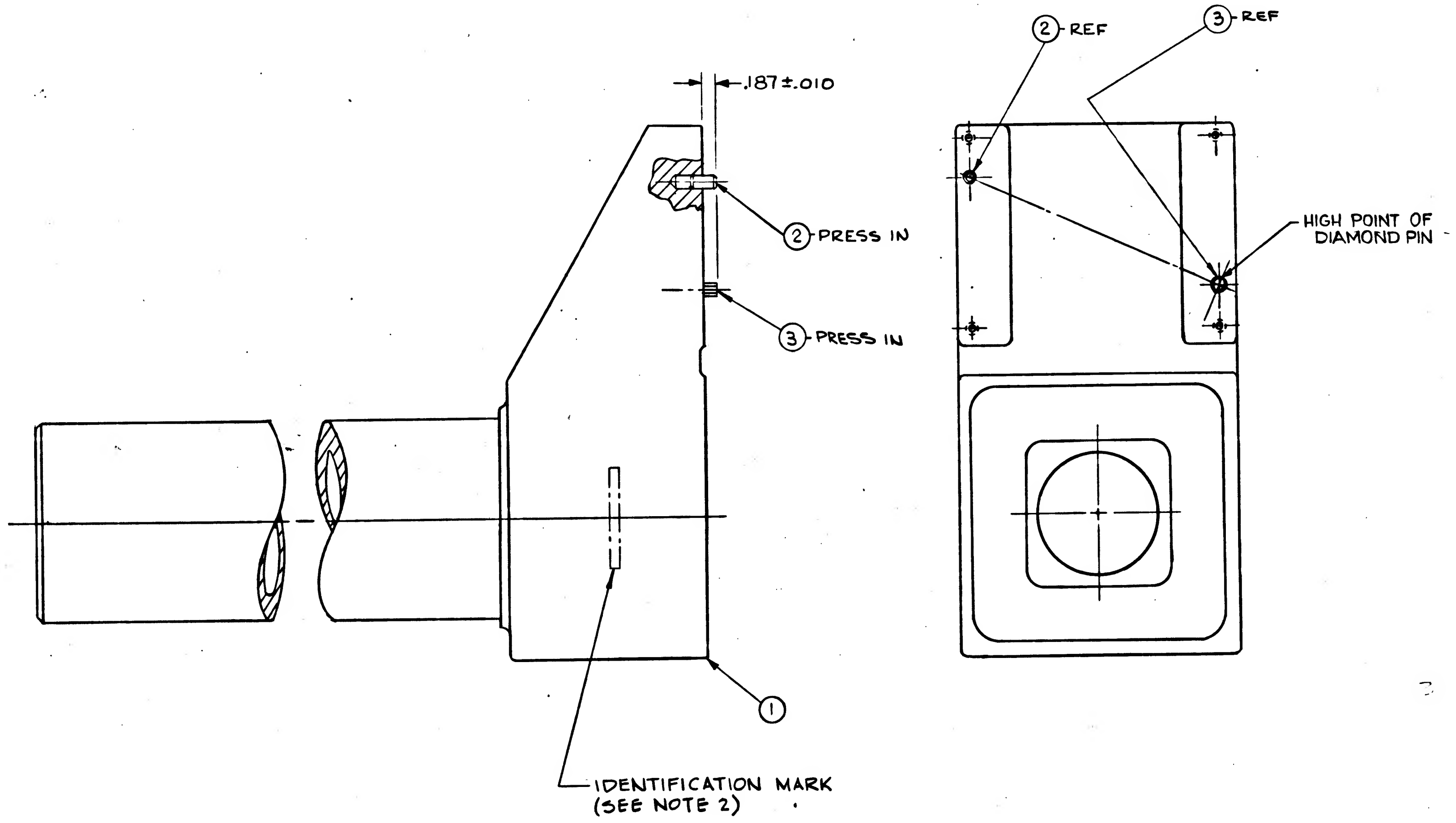
MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

TITLE
CABLE ASSEMBLY, SPECIAL
PURPOSE, ELECTRICAL
(W313)

CODE IDENT NO. 89944
SIZE E
NASA NUMBER 1022803
SCALE NONE
WEIGHT CALC ACTUAL
SHEET 2 OF 2

REVISIONS				
SYM	ZONE	DESCRIPTION	DATE	APPROVAL
—	—	CLASS A RELEASE/TDRR21729		

NOTES:
1. INTERPRET DWG PER MIL-D-70327.
2. IDENTIFY USING NASA DRAWING NUMBER, REVISION LETTER AND MANUFACTURER'S SYMBOL PER ND1002019.



ITEM NO.	QTY REQD	SYM	GOVERNMENT/NASA NO.	KOLLSMAN PART NO.	CODE IDENT	NOMENCLATURE OR DESCRIPTION	MATERIAL	SPECIFICATION	UNIT WT
3	1		1017507-3			PIN, DIAMOND			
2	1	*	1017415-71	T3002105107		PIN, DOWEL			
1	1		1022008	03386910859		HOUSING, OBJECTIVE LENS (MACHINING)			
	-011								

LIST OF PARTS AND MATERIALS

* VENDOR ITEM-SEE SOURCE CONTROL OR SPECIFICATION CONTROL DRAWING

NEXT ASSY	USED ON
1019900	1019977

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOL ON FRACTIONS ± ~ DECIMALS ± ~ ANGLES ± ~
DO NOT SCALE THIS DRAWING
MATERIAL ~
CONTRACT NAS9-497

KOLLSMAN INSTRUMENT CORPORATION
ELMHURST NEW YORK
KIC PN 02386910292
DRAWN J. MARGOLIS DATE 3-17-65
CHECKED N. Kessler 3-19-65
APPROVAL [illegible] 3-20-65
APPROVAL
NASA APPROVAL [illegible]
MIT APPROVAL [illegible]

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

TITLE
HOUSING AND PIN
ASSEMBLY

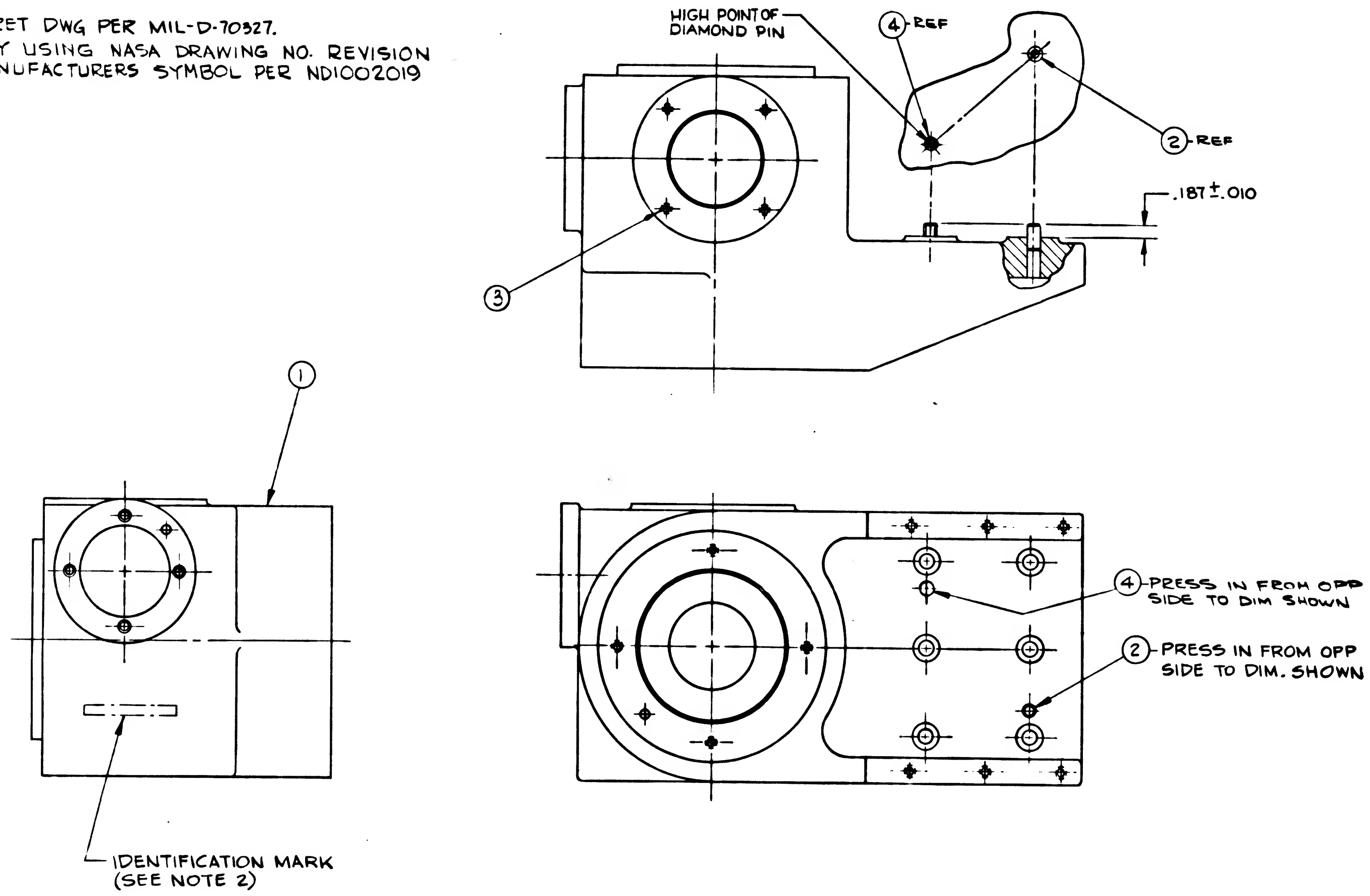
CODE IDENT NO. 89944
SIZE D
NASA NUMBER 1022807
SCALE 1/1
WEIGHT
CALC ACTUAL
SHEET 1 OF 1

MASTER

NOTES:

1. INTERPRET DWG PER MIL-D-70327.
2. IDENTIFY USING NASA DRAWING NO. REVISION AND MANUFACTURERS SYMBOL PER ND1002019

REVISIONS				
SYM	ZONE	DESCRIPTION	DATE	APPROV
—	—	CLASS A RELEASE/TDRR 21729		
A		REVISED PER ECO 112124 TDRR 23671 DATE 11-2-65	HEB 11-10-65	


HIGH POINT OF DIAMOND PIN
④-REF
②-REF
.187 ± .010
③
①
IDENTIFICATION MARK (SEE NOTE 2)
④-PRESS IN FROM OPP SIDE TO DIM SHOWN
②-PRESS IN FROM OPP SIDE TO DIM. SHOWN

*VENDOR ITEM - SEE SOURCE CONTROL OR SPECIFICATION CONTROL DRAWING.

ITEM NO.	QTY REQD	SYM	GOVERNMENT/NASA NO.	KOLLSMAN PART NO.	CODE IDENT	NOMENCLATURE OR DESCRIPTION	MATERIAL	SPECIFICATION	UNIT WT
Ⓐ 4	1		1022566	03386911902		PIN, DIAMOND			
3	4		MS122158	74433005041		INSERT, THREADED			
2	1	*	1017415-71	73002105107		PIN, DOWEL			
1	1		1022010	03386910860		BRACKET, MICROPOSITIONER (MACHINING)			
	-011	LIST OF PARTS AND MATERIALS							

NEXT ASSY	USED ON
1019900	1019977
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOL ON: FRACTIONS ± ~ DECIMALS ± ~ ANGLES ± ~
DO NOT SCALE THIS DRAWING
MATERIAL ~
CONTRACT NAS9-497

KOLLSMAN INSTRUMENT CORPORATION
ELMHURST NEW YORK
KIC PN 02386910288
DRAWN AJ PERALTA DATE 3-19-65
CHECKED W. Ketzler 3-19-65
APPROVAL
APPROVAL
NASA APPROVAL
MIT APPROVAL

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

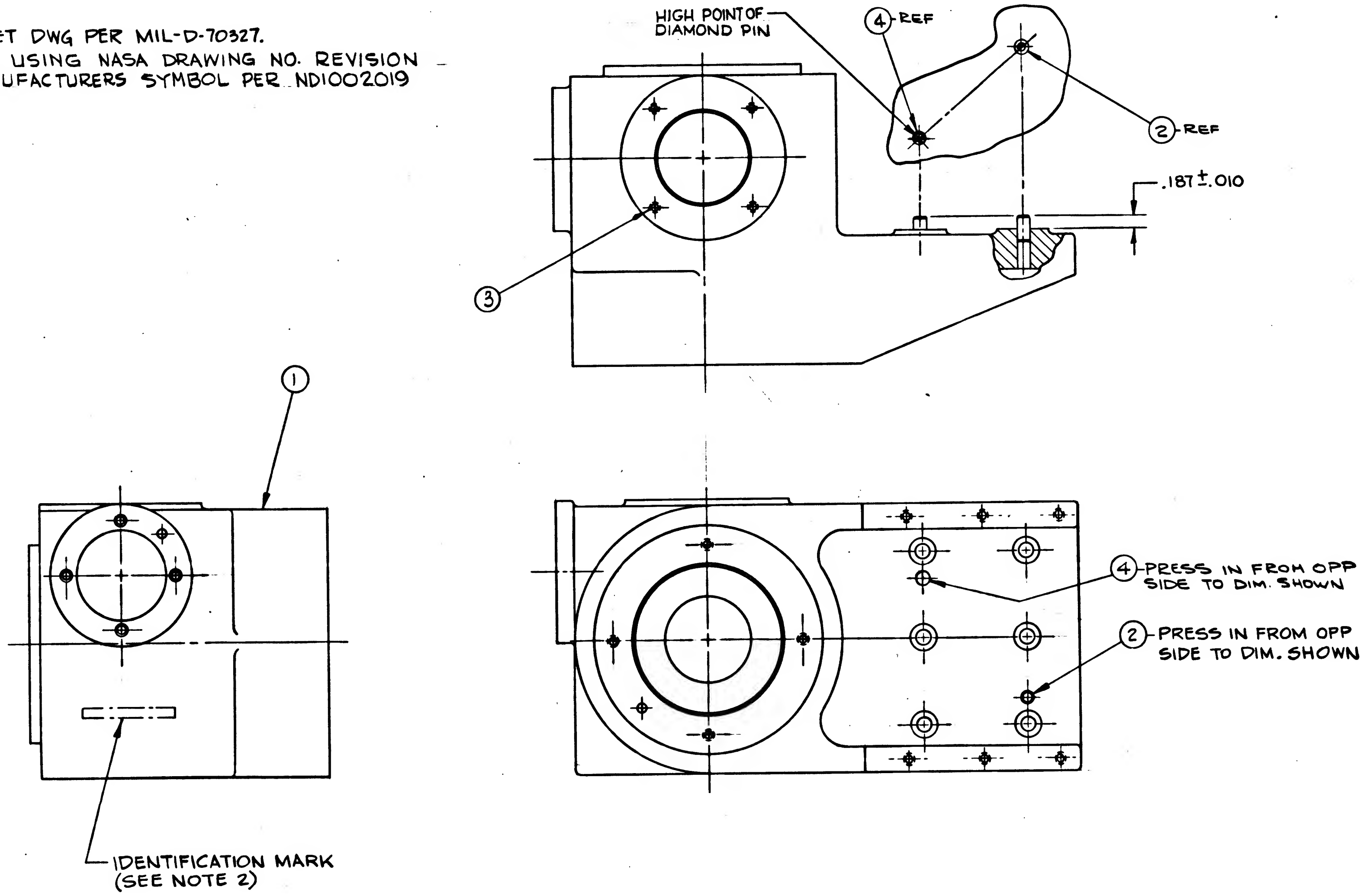
TITLE
BRACKET AND PIN
ASSEMBLY

CODE IDENT NO. 89944
SIZE D
NASA NUMBER 1022808
SCALE 1/1
WEIGHT CALC ACTUAL
SHEET 1 OF

REVISIONS				
SYM	ZONE	DESCRIPTION	DATE	APPROVAL
—	—	CLASS A RELEASE/TDRR21729		

NOTES:

1. INTERPRET DWG PER MIL-D-70327.
2. IDENTIFY USING NASA DRAWING NO. REVISION AND MANUFACTURERS SYMBOL PER ND1002019


HIGH POINT OF DIAMOND PIN
④-REF
②-REF
.187 ± .010
③
①
④-PRESS IN FROM OPP SIDE TO DIM. SHOWN
②-PRESS IN FROM OPP SIDE TO DIM. SHOWN
IDENTIFICATION MARK (SEE NOTE 2)

*VENDOR ITEM - SEE SOURCE CONTROL OR SPECIFICATION CONTROL DRAWING.

ITEM NO.	QTY REQD	SYM	GOVERNMENT/NASA NO.	KOLLSMAN PART NO.	CODE IDENT	NOMENCLATURE OR DESCRIPTION	MATERIAL	SPECIFICATION	UNIT WT
4	1		1017507-3			PIN, DIAMOND			
3	4		MS122158	74433005041		INSERT, THREADED			
2	1	*	1017415-71	73002105107		PIN, DOWEL			
1	1		1022010	03386910860		BRACKET, MICROPOSITIONER (MACHINING)			
	-011	LIST OF PARTS AND MATERIALS							

NEXT ASSY	USED ON
1019900	1019977

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOL ON: FRACTIONS ± ~ DECIMALS ± ~ ANGLES ± ~
DO NOT SCALE THIS DRAWING
MATERIAL ~
CONTRACT NAS9-497

KOLLSMAN INSTRUMENT CORPORATION
ELMHURST NEW YORK
KIC PN 02386910288
DRAWN AJ PERALTA DATE 3-19-65
CHECKED U. Ketzler 3-19-65
APPROVAL
APPROVAL
NASA APPROVAL
MIT APPROVAL

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

TITLE
BRACKET AND PIN
ASSEMBLY

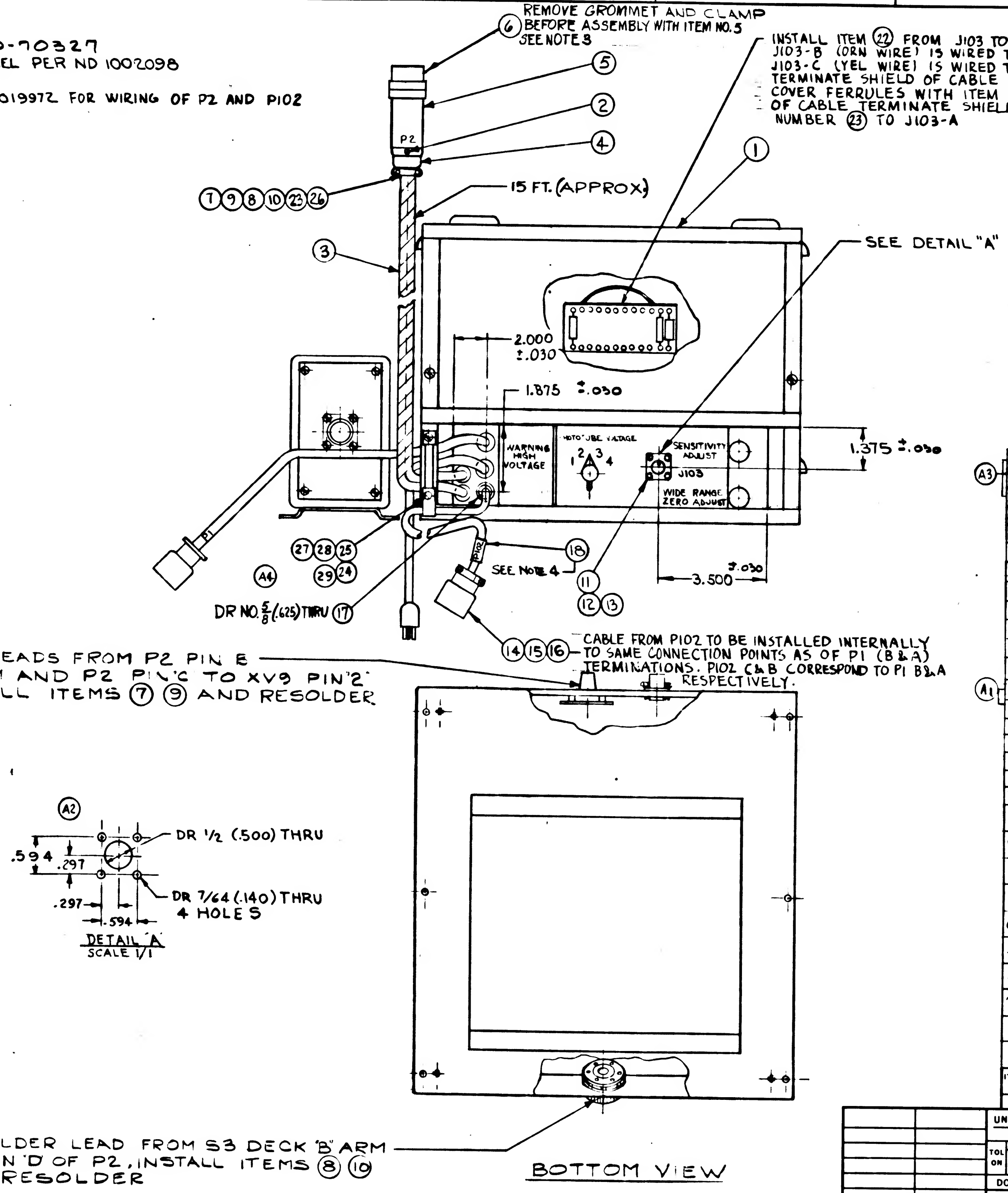
CODE IDENT NO. 89944
SIZE D
NASA NUMBER 1022808
SCALE 1/1
WEIGHT
CALC ACTUAL
SHEET 1 OF 1

MASTER

MASTER

REVISIONS TDRR 198				
SYM	ZONE	DESCRIPTION	DATE	APP
A4		REVISED PER ECO 112157 TDRR 20172 DATE: 6-15-65	6-11-65	J. 7-

NOTES:
1- INTERPRET DWG. PER MIL-D-70327
2- APPLY TWO (2) COATS OF GRAY ENAMEL PER ND 1002098 PARAGRAPH 3.13 TO CASE.
3- REFER TO SCHEMATIC DIAGRAM 1019972 FOR WIRING OF P2 AND P102
4- MARK PER ND 1002019.
5- CRIMP PER ND 1002206.



REMOVE GROMMET AND CLAMP ⑥ BEFORE ASSEMBLY WITH ITEM NO. 5 SEE NOTE 3

INSTALL ITEM ㉒ FROM J103 TO M1 METER AS FOLLOWS:
J103-B (ORN WIRE) IS WIRED TO NEGATIVE SIDE OF M1.
J103-C (YEL WIRE) IS WIRED TO PLUS SIDE OF M1
TERMINATE SHIELD OF CABLE WITH ITEM NOS. ⑲ ⑳ AND COVER FERRULES WITH ITEM NO. ㉑ AT RECEPTACLE END OF CABLE TERMINATE SHIELD WITH JUMPER (BLK) ITEM NUMBER ㉓ TO J103-A

SEE DETAIL "A"

CABLE FROM P102 TO BE INSTALLED INTERNALLY TO SAME CONNECTION POINTS AS OF P1 (B & A) TERMINATIONS. P102 C & B CORRESPOND TO P1 B & A RESPECTIVELY.

UNSOLDER LEADS FROM P2 PIN E TO S2 ARM AND P2 PIN 'C' TO XV9 PIN '2' AND INSTALL ITEMS ⑦ ⑨ AND RESOLDER

DETAIL 'A'
SCALE 1/1

UNSOLDER LEAD FROM S3 DECK 'B' ARM TO PIN 'D' OF P2, INSTALL ITEMS ⑧ ⑩ AND RESOLDER

BOTTOM VIEW

ITEM NO.	QTY REQD	SYM	GOVERNMENT/NASA NO.	KOLLSMAN PART NO.	CODE IDENT	NOMENCLATURE OR DESCRIPTION	MATERIAL	SPECIFICATION	UNIT WT
29	2		1001846-4			NUT, SELF LOCKING			
28	1	A3	AN960-C6L			WASHER, FLAT			
27	1		MS25281-4			CLAMP, LOOP			
26	1		MS25036-48	68100003406		TERMINAL, LUG, CRIMP STYLE			
25	2		MS35233-27	74455185027		SCREW, MACHINE, PAN HD			
24	1		1001841-2	74414055002		CABLE, CLAMP			
23	12"		MIL-W-16878/1B2	60601052201		WIRE, ELECTRICAL (BLK)			
22	A/R		MIL-W-16878/1B22	60521052231		CABLE, ELECTRICAL			
21	2		1001732-136	60025050009		INSULATION SLEEVING, 5/8 LONG			
20	2		1001711-8	74094045003		FERRULE			
19	2		1001707-9	74094045024		FERRULE			
18	1		1015865-166			INSULATION SLEEVING, ELECT			
17	1	A1	MS35489-11			GROMMET			
16	2FT		MIL-C-7432C0-02 LGF(2/20)0290			CABLE			
15	1		1001766-12			GROMMET, CONNECTOR, STRAIN RELIEF			
14	1		MS3126F-12-3S			CONNECTOR PLUG ELECTRICAL			
13	4		1001846-2			NUT SELF, LOCKING			
12	4		MS35233-13	74455185013		SCREW, MACHINE, PAN HD			
11	1		MS 3112E-8-3S			CONNECTOR, RECEPTACLE ELECTRICAL			
10	2		1001707-12	74094045027		FERRULE (INNER)			
9	2		1001707-15	74094045029		FERRULE (INNER)			
8	2		1001711-14	74094045007		FERRULE (OUTER)			
7	2		1001711-16	74094045008		FERRULE (OUTER)			
6	1		1001852	68013023201		CONNECTOR PLUG			
5	1		1019554	17000007121		RETAINER ELECTRICAL CONNECTOR			
4	1		1001851	68009000601		ENDBELL ASSEMBLY			
3	1		1001850-2	60035031002		WRAP, SPIRAL, HARNESS			
2	3		MS51029-9	74455062012		SET SCREW HEX SOCKET - FT. PT.			
1	1		1001845	75014001901		METER, PHOTOCURRENT			
	-011								

LIST OF PARTS AND MATERIALS

NEXT ASSY	USED ON
1019971	1019970

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOL ON: FRACTIONS ± ~ DECIMALS ± .005 ANGLES ± ~
DO NOT SCALE THIS DRAWING
MATERIAL
CONTRACT

KOLLSMAN INSTRUMENT CORPORATION
ELMHURST NEW YORK
KIC PN 02 38691 0395
DRAWN R. DeCarlo DATE 11-18-64
CHECKED E. Jrohl 4-28-65
APPROVAL 4-30-65
APPROVAL
NASA APPROVAL
MIT APPROVAL

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

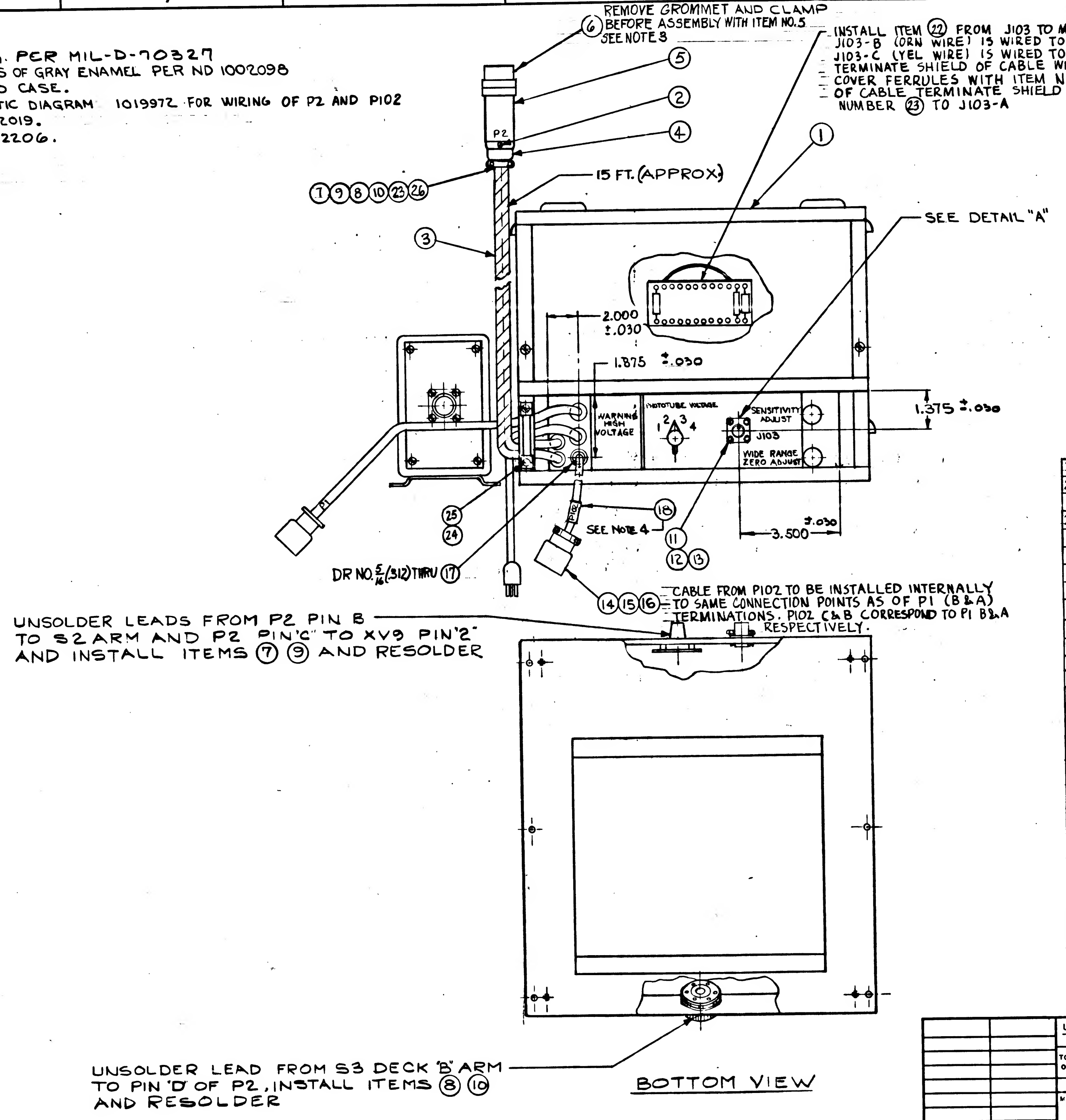
TITLE
PHOTOVOLT MULTIPLIER

CODE IDENT NO. 89944
SIZE D
NASA NUMBER 1022826
SCALE 1:2
WEIGHT CALC ACTUAL
SHEET 1 OF 1

1022826

REVISIONS TDRR 198.				
SYM	ZONE	DESCRIPTION	DATE	APP

NOTES:
1-INTERPRET DWG. PER MIL-D-70327
2-APPLY TWO (2) COATS OF GRAY ENAMEL PER ND 1002098 PARAGRAPH 3.13 TO CASE.
3-REFER TO SCHEMATIC DIAGRAM 1019972 FOR WIRING OF P2 AND P102
4-MARK PER ND 1002019.
5-CRIMP PER ND 1002206.



REMOVE GROMMET AND CLAMP BEFORE ASSEMBLY WITH ITEM NO. 5 ⑥ SEE NOTE 3

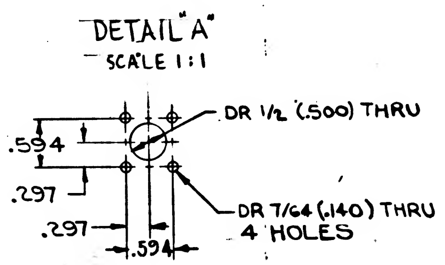
INSTALL ITEM ㉒ FROM J103 TO MI METER AS FOLLOWS:
J103-B (ORN WIRE) IS WIRED TO NEGATIVE SIDE OF MI.
J103-C (YEL WIRE) IS WIRED TO PLUS SIDE OF MI
TERMINATE SHIELD OF CABLE WITH ITEM NOS. ⑲ ⑳ AND COVER FERRULES WITH ITEM NO. ㉑ AT RECEPTACLE END OF CABLE TERMINATE SHIELD WITH JUMPER (BLK) ITEM NUMBER ㉓ TO J103-A

CABLE FROM P102 TO BE INSTALLED INTERNALLY TO SAME CONNECTION POINTS AS OF P1 (B & A) TERMINATIONS. P102 C & B CORRESPOND TO P1 B & A RESPECTIVELY.

UNSOLDER LEADS FROM P2 PIN B TO S2 ARM AND P2 PIN "C" TO XV9 PIN "2" AND INSTALL ITEMS ⑦ ⑨ AND RESOLDER

UNSOLDER LEAD FROM S3 DECK "B" ARM TO PIN "D" OF P2, INSTALL ITEMS ⑧ ⑩ AND RESOLDER

DETAIL "A"
SCALE 1:1



ITEM NO.	QTY REQD	SYM	GOVERNMENT/NASA NO.	KOLLSMAN PART NO.	CODE IDENT	NOMENCLATURE OR DESCRIPTION	MATERIAL	SPECIFICATION	UNIT WT
26	1		MS25036-48	68100003406		TERMINAL, LUG, CRIMP STYLE			
25	2		MS35233-27	74455185027		SCREW, MACHINE, PAN HD			
24	1		1001841-2	74414055002		CABLE, CLAMP			
23	12"		MIL-W-16878/1B22	60601052201		WIRE, ELECTRICAL (BLK)			
22	A/R		MIL-W-16878/1B22	60521052231		CABLE, ELECTRICAL			
21	2		1001732-136	60025050009		INSULATION SLEEVING, 5/8 LONG			
20	2		1001711-8	74094045003		FERRULE			
19	2		1001707-9	74094045024		FERRULE			
18	1		1015865-166			INSULATION SLEEVING, ELECT			
17	1		1001857	03386911190		BUSHING STRAIN RELIEF			
16	2FT		MIL-C-3432 CO-02 LGF 2/20) 0230			CABLE			
15	1		1001766-12			GROMMET, CONNECTOR, STRAIN RELIEF			
14	1		MS3126F-12-3S			CONNECTOR PLUG ELECTRICAL			
13	4		1001846-2			NUT SELF, LOCKING			
12	4		MS35233-13	74455185013		SCREW, MACHINE, PAN HD			
11	1		MS 3112E-8-3S			CONNECTOR, RECEPTACLE ELECTRICAL			
10	2		1001707-12	74094045027		FERRULE (INNER)			
9	2		1001707-15	74094045029		FERRULE (INNER)			
8	2		1001711-14	74094045007		FERRULE (OUTER)			
7	2		1001711-16	74094045008		FERRULE (OUTER)			
6	1		1001852	68013023201		CONNECTOR PLUG			
5	1		1019554	17000007121		RETAINER, ELECTRICAL CONNECTOR			
4	1		1001851	68009000601		ENDBELL ASSEMBLY			
3	1		1001850-2	60035031002		WRAP, SPIRAL, HARNESS			
2	3		MS51029-9	74455062012		SET SCREW, HEX SOCKET-FT. PT.			
1	1		1001845	75014001901		METER, PHOTOCURRENT			
	-011	LIST OF PARTS AND MATERIALS							

NEXT ASSY	USED ON
1019971	1019970

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOL ON FRACTIONS ± ~ DECIMALS ± .005 ANGLES ± ~
DO NOT SCALE THIS DRAWING
MATERIAL —
CONTRACT

KOLLSMAN INSTRUMENT CORPORATION
ELMHURST NEW YORK
KIC PN 02 386910395
DRAWN R. DeCarlo DATE 11-18-64
CHECKED E. J. Rohl 4-28-65
APPROVAL 4-30-65
APPROVAL
NASA APPROVAL 5/3/65
MIT APPROVAL 6/7/65

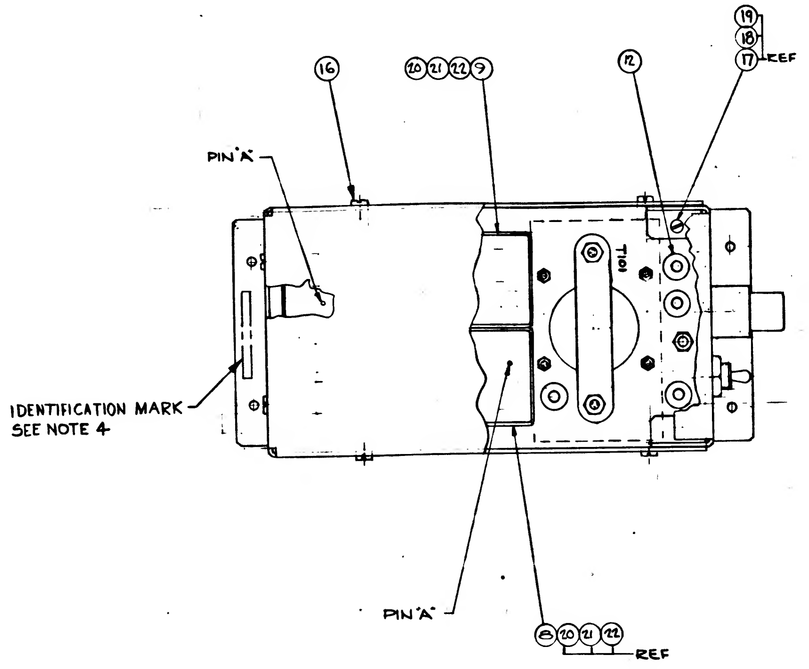
MANNED SPACECRAFT CENTER
HOUSTON, TEXAS
TITLE
PHOTOVOLT MULTIPLIER
CODE IDENT NO. 89944 SIZE D NASA NUMBER 1022826
SCALE 1:2 WEIGHT CALC ACTUAL SHEET 1 OF 1

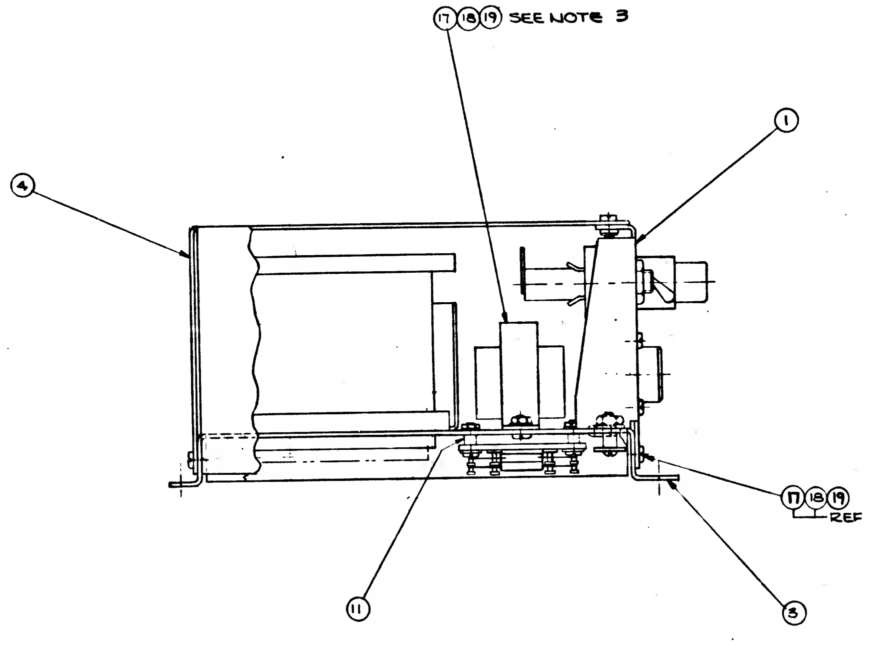
MASTER

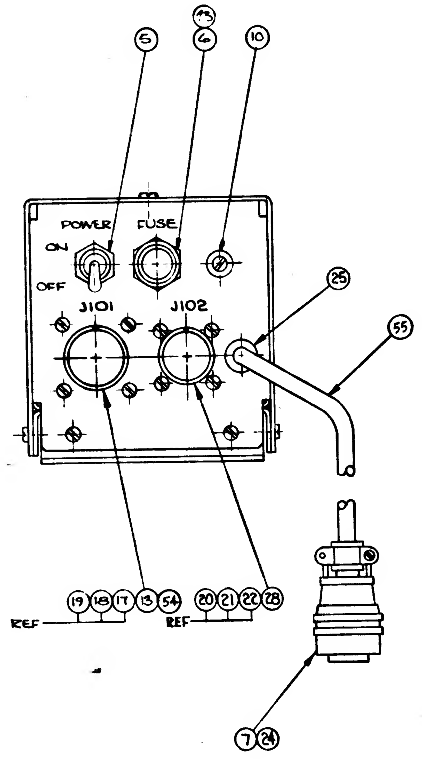
NOTES:
1. INTERPRET DWG PER MIL-D-70327.
2. SOLDER PER ND1002071.
3. TRANSFORMER (T101) SUPPLIED WITH ITEM 8.
4. IDENTIFY USING NASA DRAWING NUMBER, REVISION LETTER AND MANUFACTURER'S SYMBOL PER ND1002019.

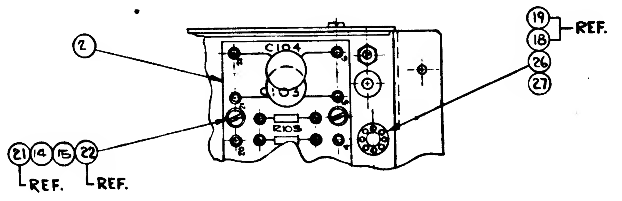
REVISIONS JDRR 17860				
SYM	ZONE	DESCRIPTION	DATE	APPROVAL

NOTE:
REFERENCE DRAWINGS
1. SCHEMATIC DIAGRAM 1022841
2. WIRING DIAGRAM 1022842









ITEM NO.	QTY REQD	SYM	GOVERNMENT/NASA NO.	KOLLSMAN PART NO.	CODE IDENT	NOMENCLATURE OR DESCRIPTION	MATERIAL	SPECIFICATION
55	24"		[illegible] FROM U, GRADE C, CL 1	60025050001		INSULATION, SLEEVING ID 3/16" (BLK)		
54	26		1001794-5			SLEEVING, INSULATION 1/2 LONG		
53	AR		1001710-22			SLEEVING, INSULATION		
52	AR		MIL-W-3861 TYPE S AWG 22	60010119308		WIRE, BARE		
51	AR							
50	24"		ND1002181 TYPE II CLASS 8	60521052231		CABL, ELECTRICAL (BLK/ORN, YEL) AWG 22		
49	AR		ND1002181 TYPE I CLASS 1	60601052203		WIRE, ELECTRICAL (RED) AWG 22		
48	AR			2204		(ORN) AWG 22		
47	AR			2205		(YEL) AWG 22		
46	AR			2006		(GRN) AWG 20		
45	AR			2219		(WHT-GY) AWG 22		
44	AR			2201		(BLK)		
43	AR			2218		(WHT-VIO)		
42	AR			2214		(WHT-ORN)		
41	AR			2220		(WHT-BLK-BRN)		
40	AR			2207		(BLU)		
39	AR			2213		(WHT-RED)		
38	AR			2211		(WHT-BLK)		
37	AR			2212		(WHT-BRN)		
36	AR			2216		(WHT-GRN) AWG 22		
35	AR			2002		(BRN) AWG 20		
34	AR							
33	AR			2217		(WHT-BLU) AWG 20		
32	AR		ND1002181 TYPE I CLASS 1	60601052210		WIRE, ELECTRICAL (WHT) AWG 22		
31	2		1001732-136	60025050009		INSULATION SLEEVING, 5/8 LONG		
30	2		1001711-8	74094045003		FERRULE		
29	2		1001707-9	74094045024		FERRULE		
28	1		MS3122E-12-3P			CONNECTOR, ELECTRICAL		
27	1		MS35233-30	74455185030		SCREW, MACHINE, PAN HD		
26	1		1001835-3			TERMINAL, GROUNDING		
25	1		1001857	03386911190		BUSHING, STRAIN RELIEF		
24	1		1001766-10			GROMMET, CONNECTOR, STRAIN RELIEF		
23	1		1001847	68151000204		FUSE, CARTRIDGE .1 AMP		
22	16		MS35649-44	61501051004		NUT, HEX		
21	16		MS35337-18	74439050002		WASHER, LOCK		
20	12		MS35233-14	74455185014		SCREW, MACHINE, PAN HD		
19	7		MS35649-64	61501051006		NUT, HEX		
18	11		MS35337-79	74439050003		WASHER, LOCK		
17	10		MS35233-27	74455185027		SCREW, MACHINE PAN HD		
16	7		MS35233-26	74455185026		SCREW, MACHINE, PAN HD		
15	4		AN960-C4L	74468050002		WASHER, PLAIN FLAT		
14	4		MS35233-17	74455185017		SCREW, MACHINE PAN HD		
13	1		1001889-2			CONNECTOR, ELECTRICAL		
12	4		MS35490-4			GROMMET		
11	4		1022251	03386910284		SPACER		
10	1		MIL-R-94, RV6LAYSA103A	65020042005		RESISTOR, VARIABLE (R105)		
9	1		1001843	03386911157		AMPLIFIER (A101)		
8	1		1001839	03386911153		DUAL POWER SUPPLY (PS101)		
7	1		MS3116F-8-3P			CONNECTOR PLUG		
6	1		1001667-2	68152001402		FUSE HOLDER		
5	1		MS35058-22			SWITCH, TOGGLE		
4	1		1022254	03386911090		COVER		
3	1		1022838-011	02386910326		SUPPORT BRACKET AND CLINCH NUT ASSY		
2	1		1022867-011	02386910127		TERMINAL BOARD ASSY		
1	1		1022840-011	02386910328		BRACKET AND NUT ASSY		
	-011							

LIST OF PARTS AND MATERIALS

NEXT ASSY	USED ON
1019971	1019970

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOL ON FRACTIONS ± — DECIMALS ± — ANGLES ± —
DO NOT SCALE THIS DRAWING
MATERIAL —
CONTRACT

KOLLSMAN INSTRUMENT CORPORATION
ELMHURST NEW YORK
KIC PN 02386910324
DRAWN K Smith DATE 4-26-65
CHECKED 4-27-65
APPROVAL 4-30-65
APPROVAL
NASA APPROVAL
MIT APPROVAL

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

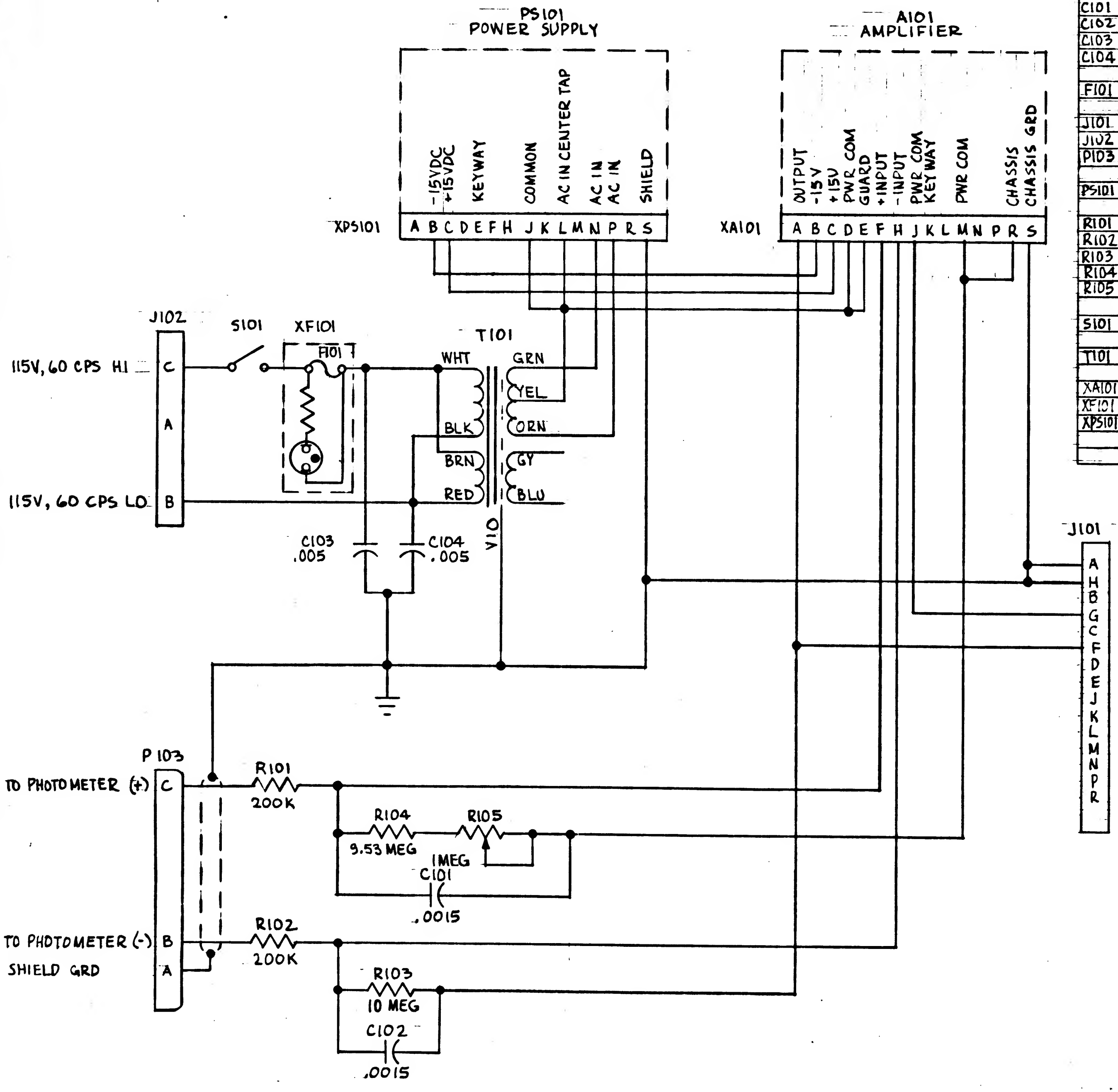
TITLE
D.C. SIGNAL
CHASSIS ASSY

CODE IDENT NO. 89944
SIZE E
NASA NUMBER 1022837
SCALE 1:1
WEIGHT CALC ACTUAL
SHEET 1 OF 1

WA

MASTER

NOTES:
1. INTERPRET DRAWING IN ACCORDANCE WITH MIL-D-70327.
2. UNLESS OTHERWISE SPECIFIED RESISTOR VALUES ARE IN OHMS AND CAPACITOR VALUES ARE IN MICROFARADS.
3. PARTS LIST TO BE FOR REFERENCE ONLY.



REFERENCE DRAWING
1. WIRING DIAGRAM 1022842

REF DESIG	ZONE	SYM	GOVERNMENT OR NASA NO.	KOLLSMAN NO.	DESCRIPTION	VALUE	TOL	RATING
A101			1001843	03386911157	AMPLIFIER			
C101			1001772-628		CAPACITOR	.0015UF	1%	100 VDC
C102			1001772-628		CAPACITOR	.0015UF	1%	100 VDC
C103			(SUPPLIED WITH PS101)		CAPACITOR	.005		250 VDC
C104			(SUPPLIED WITH PS101)		CAPACITOR	.005		250 VDC
F101			1001847	68151000204	FUSE, CARTRIDGE			0.1A
J101			1001889-2		CONNECTOR			
J102			MS3122E-12-3P		CONNECTOR			
P103			MS3116F-8-3P		CONNECTOR, PLUG			
PS101			1001839	03386911153	POWER SUPPLY			
R101			1001705-694		RESISTOR	200K	1%	1/8 W
R102			1001705-694		RESISTOR	200K	1%	1/8 W
R103			1001715-125		RESISTOR	10 MEG	1%	1/8 W
R104			1001715-123		RESISTOR	9.53MEG	1%	1/8 W
R105			MIL-R-94, RV6LAXSA105A	65020042005	RESISTOR	1 MEG		
S101			MS35058-22		SWITCH			
T101			(SUPPLIED WITH PS101)		TRANSFORMER			
XA101			(SUPPLIED WITH A101)		CONNECTOR			
XF101			1001667-2	68152001402	FUSEHOLDER			
XPS101			(SUPPLIED WITH PS101)		CONNECTOR			

REVISIONS TDRR 19808

SYM	ZONE	DESCRIPTION	DATE	APPROVAL

ITEM NO.	QTY REQD	SYM	GOVERNMENT/NASA NO.	KOLLSMAN PART NO.	CODE IDENT	NOMENCLATURE OR DESCRIPTION	MATERIAL	SPECIFICATION	UNIT WT

LIST OF PARTS AND MATERIALS

NEXT ASSY	USED ON
1022837	1019970

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOL ON FRACTIONS ± — DECIMALS ± — ANGLES ± —
DO NOT SCALE THIS DRAWING
MATERIAL —
CONTRACT

KOLLSMAN INSTRUMENT CORPORATION
ELMHURST NEW YORK
KIC PN 02386910329
DRAWN J. MARGIOTTA DATE 4-23-65
CHECKED E. F. Schneider 5-7-65
APPROVAL W. Meyers 5-7-65
APPROVAL
NASA APPROVAL [illegible]
MIT APPROVAL [illegible]

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

TITLE
DC SIGNAL CHASSIS
SCHEMATIC DIAGRAM

CODE IDENT NO. 89944
SIZE D
NASA NUMBER 1022841
SCALE 1:1
WEIGHT
CALC ACTUAL
SHEET 1 OF

MASTER

AD-1390

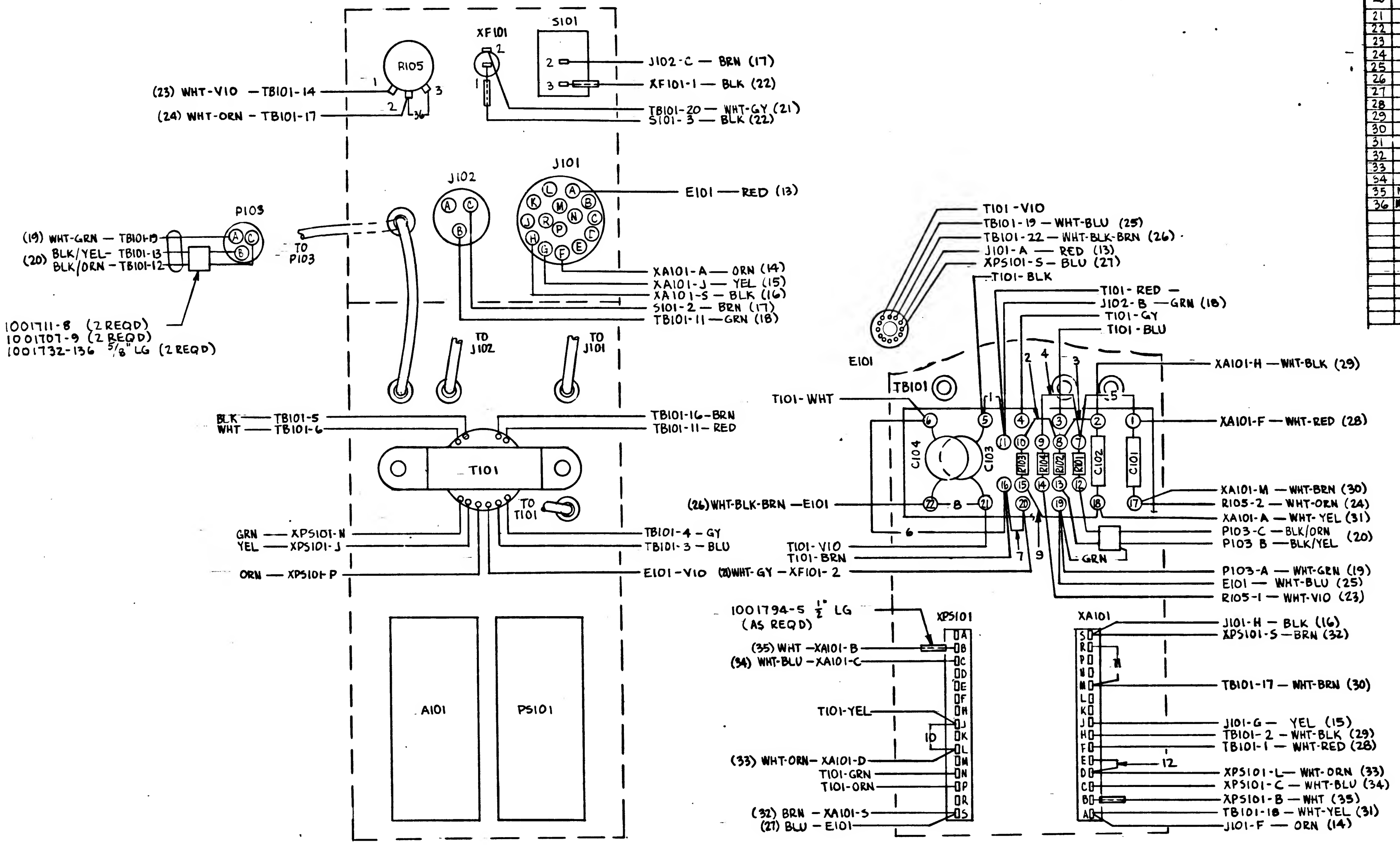
1022841

NOTES:
1. INTERPRET DRAWING IN ACCORDANCE WITH MIL-D-70327.
2. ALL PART NUMBERS FOR REFERENCE ONLY
3. SOLDER PER ND 1002071

COND NO.	PART NO. (REF)	AWG SIZE	COLOR	APPROX LENGTH	FROM COMPONENT	TO COMPONENT	SLEEVING (REF)
1	MIL-W-3861 TYPE S	22	BARE WIRE	—	TB101-5	TB101-11	1001710-22
2	↑	↑	↑		TB101-8	TB101-10	↑
3					TB101-2	TB101-8	
4					TB101-7	TB101-9	
5					TB101-1	TB101-7	
6					TB101-6	TB101-21	
7					TB101-16	TB101-20	
8					TB101-21	TB101-22	
9					TB101-15	TB101-18	
10					XPS101-J	XPS101-L	
11	↓	↓	↓		XA101-R	XA101-M	↓
12	MIL-W-3861 TYPE S	22	BARE WIRE		XA101-D	XA101-E	1001710-22
13	ND 1002181	22	RED		J101-A	E101	
14	↑	22	ORN		J101-F	XA101-A	
15		22	YEL		J101-G	XA101-J	
16		22	BLK		J101-H	XA101-S	
17		20	BRN		J102-C	S101-2	
18		20	GRN		J102-B	TB101-11	
19		22	WHT-GRN		P103-A	TB101-19	
20		↑	BLK/YEL BLK/ORN		P103-B P103-C	TB101-13 TB101-12	
21			WHT-GY		XF101-2	TB101-20	
22			BLK		XF101-1	S101-3	
23			WHT-VIO		R105-1	TB101-14	
24			WHT-ORN		R105-2	TB101-17	
25			WHT-BLU		E101	TB101-19	
26			WHT-BLK-BRN		E101	TB101-22	
27			BLU		E101	XPS101-S	
28			WHT-RED		TB101-1	XA101-F	
29			WHT-BLK		TB101-2	XA101-H	
30			WHT-BRN		TB101-17	XA101-M	
31			WHT-YEL		TB101-18	XA101-A	
32			BRN		XA101-S	XPS101-S	
33			WHT-ORN		XA101-D	XPS101-L	
34	↓	↓	WHT-BLU		XA101-C	XPS101-C	
35	ND1002181	22	WHT		XA101-B	XPS101-B	
36	MIL-W-3861 TYPE S	22	BARE WIRE		R105-2	R105-3	

SYM	ZONE	DESCRIPTION	DATE	APPROVAL

REVISIONS



REFERENCE DRAWING
1. SCHEMATIC DIAGRAM 1022841

ITEM NO.	QTY REQD	SYM	GOVERNMENT/NASA NO.	KOLLSMAN PART NO.	CODE IDENT	NOMENCLATURE OR DESCRIPTION	MATERIAL	SPECIFICATION	UNIT WT

LIST OF PARTS AND MATERIALS

NEXT ASSY	USED ON
1022837	1019970

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOL ON FRACTIONS ± — DECIMALS ± — ANGLES ± —
DO NOT SCALE THIS DRAWING
MATERIAL —
CONTRACT

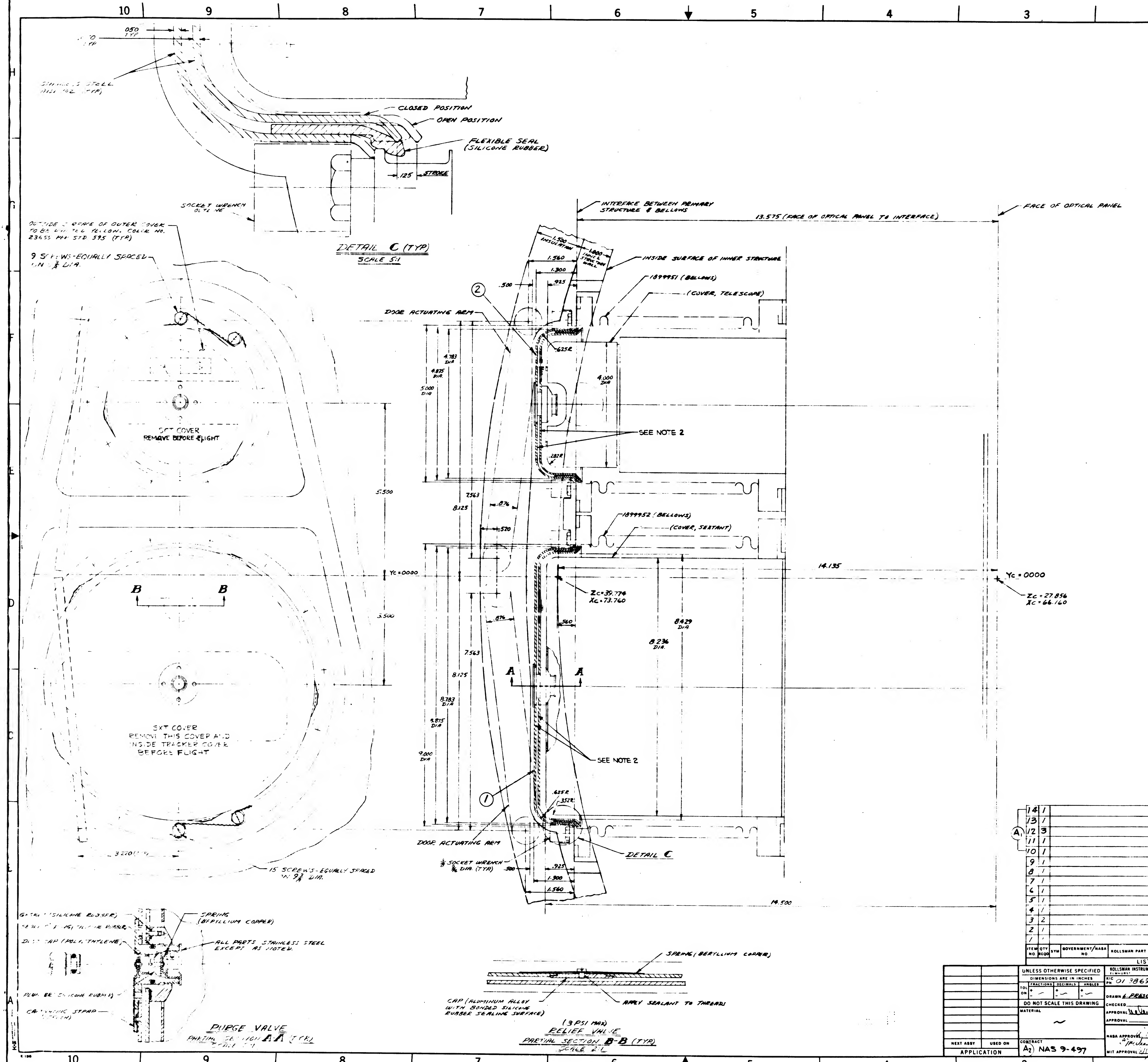
KOLLSMAN INSTRUMENT CORPORATION
ELMHURST NEW YORK
KIC PN 02386910330
DRAWN L. MARGIOTTA DATE 5-7-65
CHECKED E.F. 5-7-65
APPROVAL 5-7-65
APPROVAL
NASA APPROVAL
MIT APPROVAL

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

TITLE
DC SIGNAL CHASSIS
WIRING DIAGRAM

CODE IDENT NO. 89944 SIZE E NASA NUMBER 1022842
SCALE NONE WEIGHT CALC ACTUAL SHEET 1 OF 1

MASTER


050 TYP
DETAIL C (TYP)
SCALE 5:1
CLOSED POSITION
OPEN POSITION
FLEXIBLE SEAL (SILICONE RUBBER)
.125
STROKE
SOCKET WRENCH OUTLINE
OUTSIDE SURFACE OF OUTER COVER TO BE PAINTED YELLOW. COLOR NO. 23655 PER STD 595 (TYP)
9 SCREWS-EQUALLY SPACED ON 5/8 DIA.
SCT COVER REMOVE BEFORE FLIGHT
SXT COVER REMOVE THIS COVER AND INSIDE TRACKER COVER BEFORE FLIGHT
B B
15 SCREWS-EQUALLY SPACED ON 9 3/8 DIA.
INTERFACE BETWEEN PRIMARY STRUCTURE & BELLOWS
13.575 (FACE OF OPTICAL PANEL TO INTERFACE)
FACE OF OPTICAL PANEL
1.500 INSULATION
1.000 INNER STRUCTURE WALL
INSIDE SURFACE OF INNER STRUCTURE
1899951 (BELLOWS)
(COVER, TELESCOPE)
1899952 (BELLOWS)
(COVER, SEXTANT)
DOOR ACTUATING ARM
②
①
.500
1.560
1.300
.925
.625R
.282R
4.783 DIA
4.875 DIA
5.000 DIA
4.000 DIA
SEE NOTE 2
5.500
3.500
7.563
8.125
.876
.520
.560
Yc = 0000
Zc = 39.774 Xc = 73.760
Zc = 27.856 Xc = 66.160
14.135
8.429 DIA
8.236 DIA
8.783 DIA
8.815 DIA
9.000 DIA
A A
.352R
3/8 SOCKET WRENCH 9/16 DIA. (TYP)
DETAIL C
14.500
GASKET (SILICONE RUBBER)
SEALING RING (SILICONE RUBBER)
DUST CAP (POLYETHYLENE)
SPRING (BERYLLIUM COPPER)
ALL PARTS STAINLESS STEEL EXCEPT AS NOTED.
PLUNGER (SILICONE RUBBER)
CAPTIVATING STRAP (NYLON)
PURGE VALVE
PARTIAL SECTION A-A (TYP)
SPRING (BERYLLIUM COPPER)
CAP (ALUMINUM ALLOY WITH BONDED SILICONE RUBBER SEALING SURFACE)
APPLY SEALANT TO THREADS
(3 PSI MAX)
RELIEF VALVE
PARTIAL SECTION B-B (TYP)
SCALE 2:1
10 9 8 7 6 5 4 3 2 1
H G F E D C B A

REVISIONS 2

SYM	ZONE	DESCRIPTION	DATE	APPROVAL
A		REVISED PER ECO 116238 TDRR G27271 DATE 3-7-66	JPD 3-18-66	3-18/66

LIST OF PARTS AND MATERIALS

ITEM NO	QTY REQD	SYM	GOVERNMENT/NASA NO	KOLLSMAN PART NO	CODE IDENT	NOMENCLATURE OR DESCRIPTION	MATERIAL	SPECIFICATION	UNIT WT
14	1	A1				TELESCOPE COVER ASSY			
13	1	A1				SEXTANT COVER ASSY			
12	3	A1				COVER PLUG			
11	1	A1				COVER, SCT BASE			
10	1	A1				COVER, SXT BASE			
9	1					COVER, LONG EYE RELIEF EYEPIECE BASE (SXT)			
8	1					COVER, LONG EYE RELIEF EYEPIECE (SXT)			
7	1					COVER LONG EYE RELIEF EYEPIECE BASE (SCT			
6	1					COVER, LONG EYE RELIEF EYEPIECE (SC			
5	1					COVER SXT BASE			
4	1					COVER, SCT BASE			
3	2					COVER, SCT AND SXT EYEPIECE			
2	1					COVER ASSY, TELESCOPE			
1	1					COVER ASSY, SEXTANT			

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES

TOLERANCE ON	FRACTIONS	DECIMALS	ANGLES
	± ~	± ~	± ~

DO NOT SCALE THIS DRAWING

MATERIAL ~

NEXT ASSY — USED ON — APPLICATION

CONTRACT A2 NAS 9-497

KOLLSMAN INSTRUMENT CORPORATION
ELMHURST NEW YORK
KIC PN 01 38691 0052

DRAWN L. PRESCOTT DATE 2-14-65
CHECKED
APPROVAL
APPROVAL
NASA APPROVAL
MIT APPROVAL

MANNED
SPACECRAFT CENTER
HOUSTON TEXAS

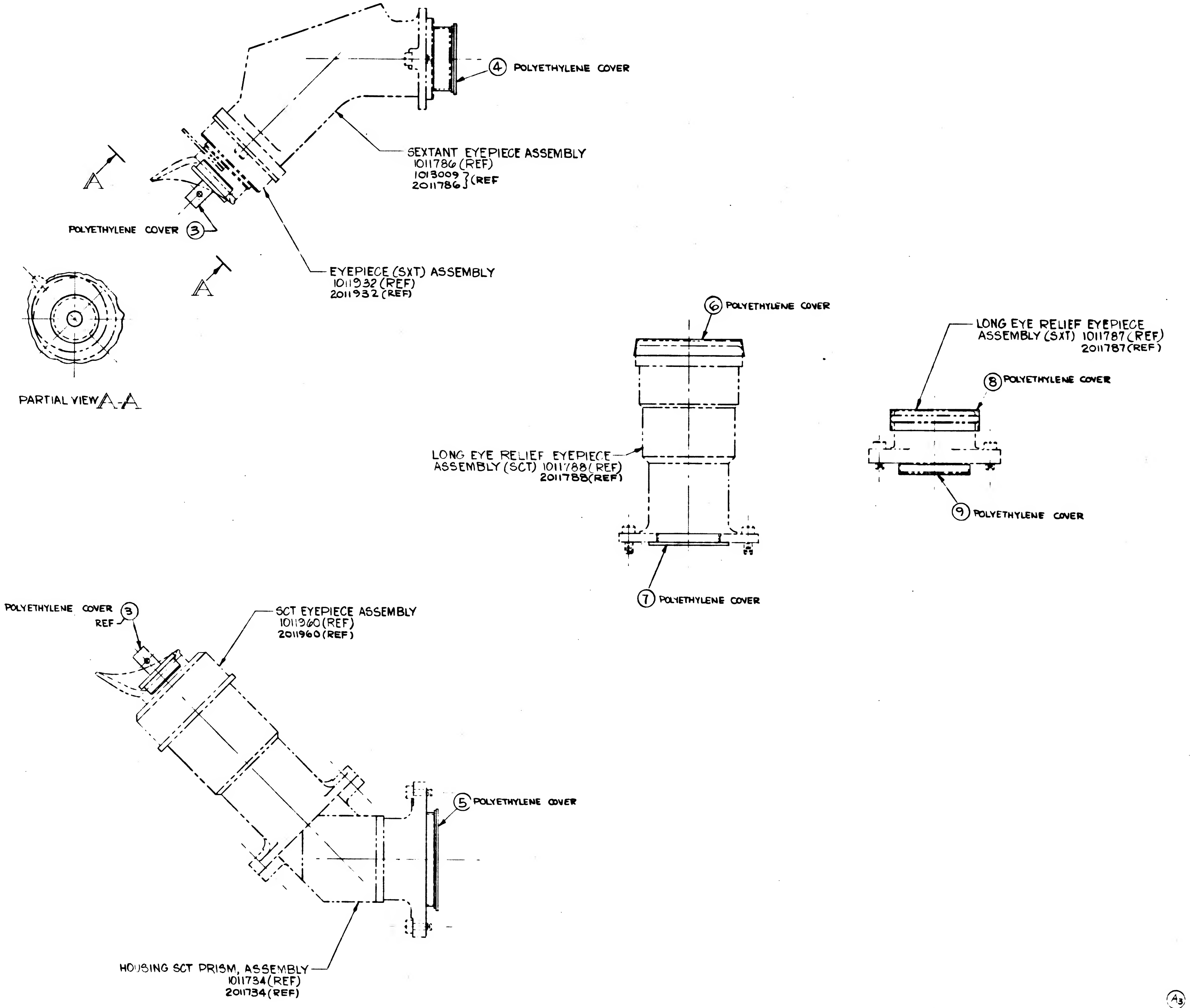
TITLE
MECHANIZATION DRAWING FO
PROTECTIVE COVERS FOR SX
AND SCT BLK I -100, II

CODE IDENT NO	SIZE	NASA NUMBER
89944	E	1022865

SCALE — WEIGHT CALC ACTUAL — SHEET 1 OF 5

REVISIONS				
SYM	ZONE	DESCRIPTION	DATE	APPROVAL
A		REVISED PER ECO11628 TURR 627271 DATE 3-4-66	JPD 3-18-66	

NOTES
1. INTERPRET DWG PER MIL-D-70327
2. TOP OF COVERS TO BE DIMPLED WITH LONG AXIS OF DIMPLES ALONG RADII. DIMPLES TO BE EQUI-SPACED CIRCUMFERENTIALLY.



④ POLYETHYLENE COVER
SEXTANT EYEPIECE ASSEMBLY 1011786 (REF) 1013009 2011786 } (REF
A
POLYETHYLENE COVER ③
A
EYEPIECE (SXT) ASSEMBLY 1011932 (REF) 2011932 (REF)
PARTIAL VIEW A-A
⑥ POLYETHYLENE COVER
LONG EYE RELIEF EYEPIECE ASSEMBLY (SCT) 1011788 (REF) 2011788 (REF)
⑦ POLYETHYLENE COVER
LONG EYE RELIEF EYEPIECE ASSEMBLY (SXT) 1011787 (REF) 2011787 (REF)
⑧ POLYETHYLENE COVER
⑨ POLYETHYLENE COVER
POLYETHYLENE COVER ③ REF
SCT EYEPIECE ASSEMBLY 1011960 (REF) 2011960 (REF)
⑤ POLYETHYLENE COVER
HOUSING SCT PRISM, ASSEMBLY 1011734 (REF) 2011734 (REF)
A3

ITEM NO	QTY REQD	SYM	GOVERNMENT/NASA NO.	KOLLSMAN PART NO.	CODE IDENT	NOMENCLATURE OR DESCRIPTION	MATERIAL	SPECIFICATION	UNIT WT

LIST OF PARTS AND MATERIALS

NEXT ASSY | USED ON
APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOL ON FRACTIONS ± ~ DECIMALS ± ~ ANGLES ± ~
DO NOT SCALE THIS DRAWING
MATERIAL ~
CONTRACT NAS 9-497 A2

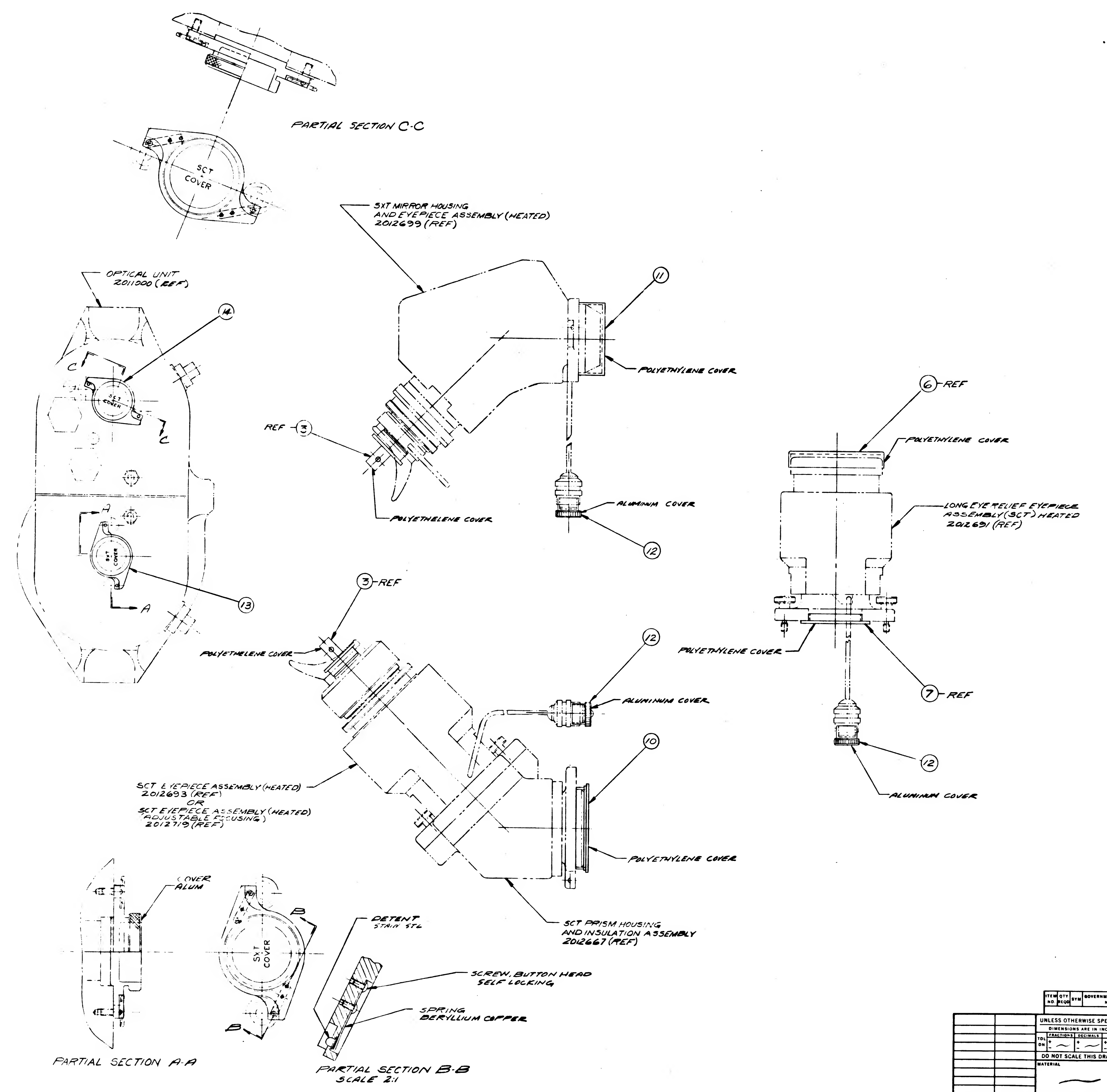
KOLLSMAN INSTRUMENT CORPORATION
ELMHURST NEW YORK
KIC PN 01386910052
DRAWN E.J ROHL DATE 4-30-65
CHECKED
APPROVAL
APPROVAL J Moore
NASA APPROVAL
MIT APPROVAL

01386910052
MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

TITLE MECHANIZATION DWG FOR PROTECTIVE COVERS FOR SXT AND SCT - BLK I, I-100, II

CODE IDENT NO 89944 | SIZE E | NASA NUMBER 1022865
SCALE 1/1 | WEIGHT CALC ACTUAL | SHEET 2 OF 3

REVISIONS				
SYM	ZONE	DESCRIPTION	DATE	APPROVAL
A		THIS SHEET ADDED PER TORR 627271	3/4/66	RJE 3/3/66


PARTIAL SECTION C-C
SCT COVER
OPTICAL UNIT 2011000 (REF)
14
C
C
SCT COVER
A
SXT COVER
A
13
SXT MIRROR HOUSING AND EYEPIECE ASSEMBLY (HEATED) 2012699 (REF)
11
POLYETHYLENE COVER
REF 3
POLYETHELENE COVER
ALUMINUM COVER
12
6 REF
POLYETHYLENE COVER
LONG EYE RELIEF EYEPIECE ASSEMBLY (SCT) HEATED 2012691 (REF)
POLYETHYLENE COVER
7 REF
12
ALUMINUM COVER
3 REF
POLYETHELENE COVER
12
ALUMINUM COVER
10
SCT EYEPIECE ASSEMBLY (HEATED) 2012693 (REF) OR SCT EYEPIECE ASSEMBLY (HEATED) (ADJUSTABLE FOCUSING) 2012719 (REF)
POLYETHYLENE COVER
SCT PRISM HOUSING AND INSULATION ASSEMBLY 2012667 (REF)
COVER ALUM
B
SXT COVER
B
DETENT STAIN STL
SCREW, BUTTON HEAD SELF LOCKING
SPRING BERYLLIUM COPPER
PARTIAL SECTION A-A
PARTIAL SECTION B-B SCALE 2:1

ITEM NO.	QTY REQD	SYM	GOVERNMENT/NASA NO.	KOLLSMAN PART NO.	CODE IDENT	NOMENCLATURE OR DESCRIPTION	MATERIAL	SPECIFICATION	UNIT WT

LIST OF PARTS AND MATERIALS

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOL ON FRACTIONS ± ~ DECIMALS ± ~ ANGLES ± ~
DO NOT SCALE THIS DRAWING
MATERIAL ~

NEXT ASSY | USED ON
APPLICATION

CONTRACT NAS9-497

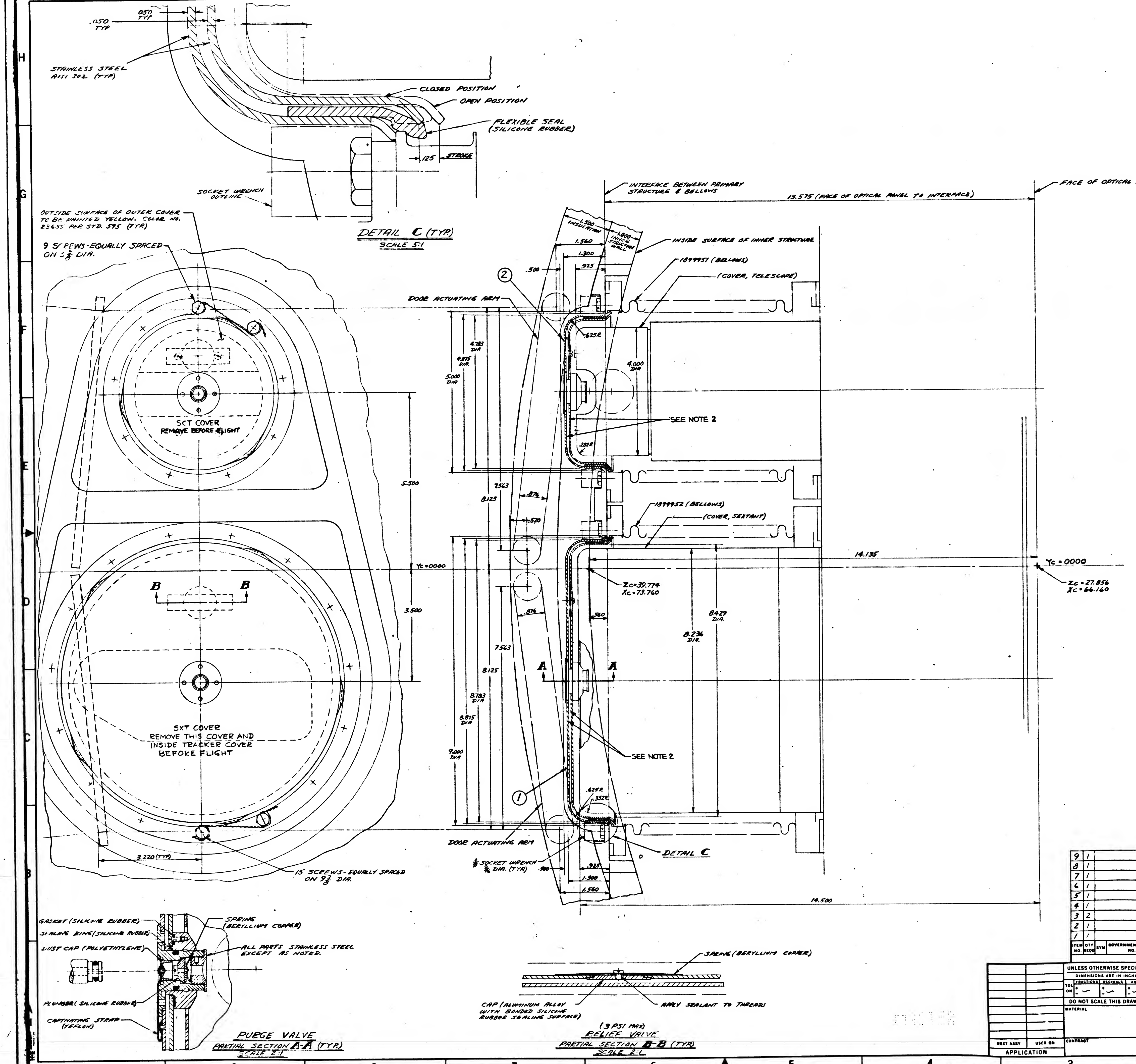
KOLLSMAN INSTRUMENT CORPORATION
ELMHURST NEW YORK
KIC PN 1386910050
DRAWN B. KOZLOWSKI DATE 2-15-66
CHECKED B. [illegible] 3-66
APPROVAL [illegible] 3-3-66
APPROVAL
NASA APPROVAL
MIT APPROVAL

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

TITLE MECHANIZATION DRAWING FOR PROTECTIVE COVERS FOR SXT AND SCT. BLK I, I-100, II

CODE IDENT NO. 89944
SIZE E
NASA NUMBER 1022865
SCALE 1/1
WEIGHT CALC ACTUAL
SHEET 3 OF 3

REVISIONS				
SYM	ZONE	DESCRIPTION	DATE	APPROVAL


.050 TYP
.050 TYP
STAINLESS STEEL AISI 302 (TYP)
CLOSED POSITION
OPEN POSITION
FLEXIBLE SEAL (SILICONE RUBBER)
.125
STROKE
SOCKET WRENCH OUTLINE
DETAIL C (TYP)
SCALE 5:1
OUTSIDE SURFACE OF OUTER COVER TO BE PAINTED YELLOW. COLOR NO. 23655 PER STD. 595 (TYP)
9 SCREWS-EQUALLY SPACED ON 5 3/8 DIA.
SCT COVER
REMOVE BEFORE FLIGHT
SXT COVER
REMOVE THIS COVER AND INSIDE TRACKER COVER BEFORE FLIGHT
B
B
3.220 (TYP)
15 SCREWS-EQUALLY SPACED ON 9 3/8 DIA.
5.500
3.500
Yc = 0.000
INTERFACE BETWEEN PRIMARY STRUCTURE & BELLOWS
13.575 (FACE OF OPTICAL PANEL TO INTERFACE)
FACE OF OPTICAL PANEL
1.500 INSULATION
1.000 INNER STRUCTURE WALL
INSIDE SURFACE OF INNER STRUCTURE
1.560
1.300
.925
.500
2
1899951 (BELLOWS)
(COVER, TELESCOPE)
DOOR ACTUATING ARM
.625R
4.783 DIA
4.875 DIA
5.000 DIA
4.000 DIA
SEE NOTE 2
.282R
7.563
8.125
.876
.570
1899952 (BELLOWS)
(COVER, SEXTANT)
14.135
Yc = 0000
Zc = 27.856
Xc = 66.160
Zc = 39.774
Xc = 73.760
.560
8.429 DIA.
8.236 DIA.
.876
7.563
8.125
A
A
8.783 DIA
8.875 DIA
9.000 DIA
SEE NOTE 2
1
.625R
.352R
DOOR ACTUATING ARM
DETAIL C
3/8 SOCKET WRENCH 9/16 DIA. (TYP)
.500
.925
1.300
1.560
14.500
GASKET (SILICONE RUBBER)
SEALING RING (SILICONE RUBBER)
DUST CAP (POLYETHYLENE)
PLUNGER (SILICONE RUBBER)
CAPTIVATING STRAP (TEFLON)
SPRING (BERYLLIUM COPPER)
ALL PARTS STAINLESS STEEL EXCEPT AS NOTED.
PURGE VALVE
PARTIAL SECTION A-A (TYP.)
SCALE 2:1
SPRING (BERYLLIUM COPPER)
CAP (ALUMINUM ALLOY WITH BONDED SILICONE RUBBER SEALING SURFACE)
APPLY SEALANT TO THREADS
(3 PSI MAX)
RELIEF VALVE
PARTIAL SECTION B-B (TYP)
SCALE 2:1

ITEM NO.	QTY REQD	SYM	GOVERNMENT/NASA NO.	KOLLSMAN PART NO.	CODE IDENT	NOMENCLATURE OR DESCRIPTION	MATERIAL	SPECIFICATION	UNIT WT
9	1					COVER, LONG EYE RELIEF EYEPIECE BASE (SXT)			
8	1					COVER, LONG EYE RELIEF EYEPIECE (SXT)			
7	1					COVER, LONG EYE RELIEF EYEPIECE BASE (SCT)			
6	1					COVER, LONG EYE RELIEF EYEPIECE (SCT)			
5	1					COVER, SXT BASE			
4	1					COVER, SCT BASE			
3	2					COVER, SCT AND SXT EYEPIECE			
2	1					COVER ASSY, TELESCOPE			
1	1					COVER ASSY, SEXTANT			

LIST OF PARTS AND MATERIALS

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOL ON: FRACTIONS ± ~ DECIMALS ± ~ ANGLES ± ~
DO NOT SCALE THIS DRAWING
MATERIAL
CONTRACT

NEXT ASSY | USED ON
APPLICATION

KOLLSMAN INSTRUMENT CORPORATION
ELMHURST NEW YORK
KIC PN 01 38691 0052
DRAWN L. PRESCOTT DATE 7-14-65
CHECKED
APPROVAL [illegible] 7/14/65
APPROVAL
NASA APPROVAL [illegible] 7/21/65
[illegible] 7-14-65
MIT APPROVAL [illegible] 21 Jul 65

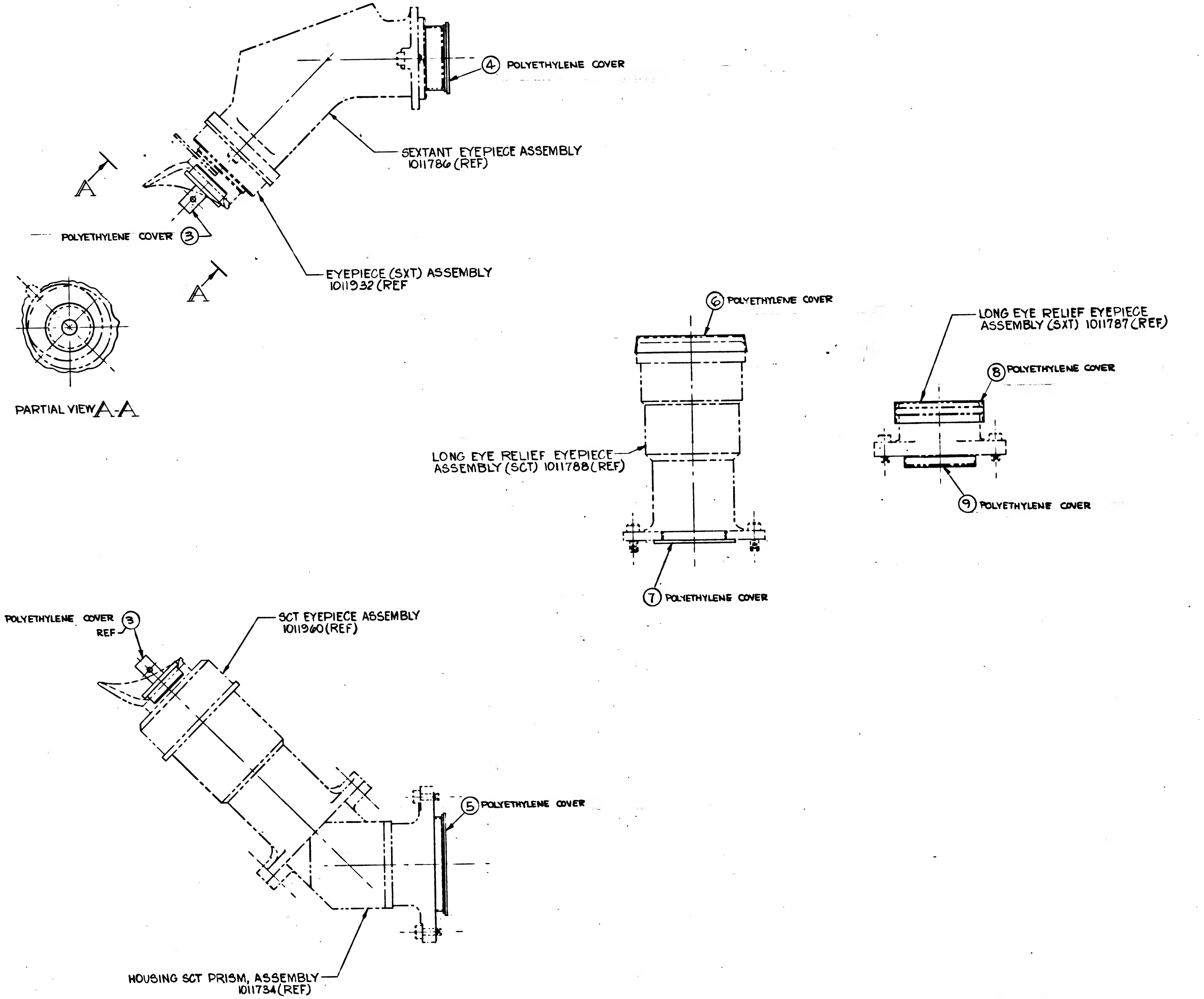
MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

TITLE
MECHANIZATION DRAWING FOR PROTECTIVE COVERS FOR SXT AND SCT. BLK I, I-100, II

CODE IDENT NO. 89944
SIZE E
NASA NUMBER 1022865
SCALE
WEIGHT CALC ACTUAL
SHEET 1 OF 2

REVISIONS				
SYM	ZONE	DESCRIPTION	DATE	APPROVAL

NOT 3:
1. \ ERPRET DWG PER MIL-D-70327
2 OF COVERS TO BE DIMPLED WITH LONG AXIS DIMPLES ALONG RADII. DIMPLES TO BE EQUI-SPACED CUMFERENTIALLY.



④ POLYETHYLENE COVER
SEXTANT EYEPIECE ASSEMBLY 1011786 (REF)
A
A
POLYETHYLENE COVER ③
EYEPIECE (SXT) ASSEMBLY 1011932 (REF
PARTIAL VIEW A-A
⑥ POLYETHYLENE COVER
LONG EYE RELIEF EYEPIECE ASSEMBLY (SCT) 1011788 (REF)
⑦ POLYETHYLENE COVER
LONG EYE RELIEF EYEPIECE ASSEMBLY (SXT) 1011787 (REF)
⑧ POLYETHYLENE COVER
⑨ POLYETHYLENE COVER
POLYETHYLENE COVER ③ REF
SCT EYEPIECE ASSEMBLY 1011960 (REF)
⑤ POLYETHYLENE COVER
HOUSING SCT PRISM, ASSEMBLY 1011734 (REF)

ITEM NO.	QTY REQD	SYM	GOVERNMENT/NASA NO.	KOLLSMAN PART NO.	CODE IDENT	NOMENCLATURE OR DESCRIPTION	MATERIAL	SPECIFICATION	WT

LIST OF PARTS AND MATERIALS

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOL ON FRACTIONS ± ~ DECIMALS ± ~ ANGLES ± ~
DO NOT SCALE THIS DRAWING
MATERIAL ~
CONTRACT

KOLLSMAN INSTRUMENT CORPORATION
ELMHURST NEW YORK
KIC PN 01386910052
DRAWN E.J ROHL DATE 4-30-65
CHECKED
APPROVAL 5-13-6
APPROVAL 5-13-6
NASA APPROVAL 7/4/65
MIT APPROVAL 21 July 65

01 386910052
MANNED SPACECRAFT CENTER
HOUSTON, TEXAS
TITLE MECHANIZATION DWG FOR PROTECTIVE COVERS FOR SXT AND SCT - BLK I, I-[illegible]
CODE IDENT NO. 89944
SIZE E
NASA NUMBER 1022865
SCALE 1/1
WEIGHT CALC ACTUAL
SHEET 2 OF 2

1022865

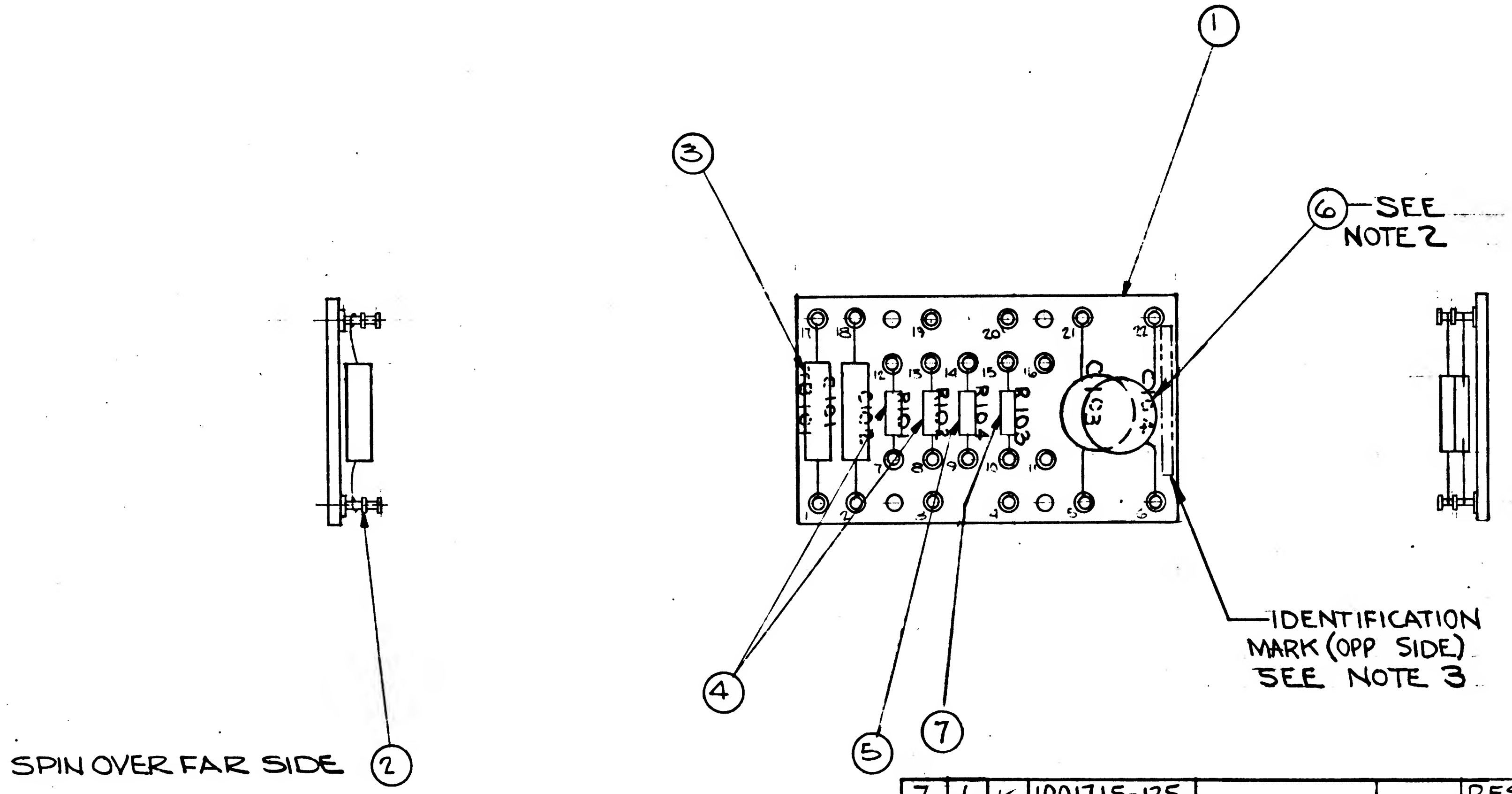
WA

REVISIONS TDRR 19860

SYM	ZONE	DESCRIPTION	DATE	APPROVAL

NOTES:

1. INTERPRET DWG PER MIL-D-70327
2. CAPACITORS ITEM 6 "C103 AND C104 ARE SUPPLIED WITH PART NO. 1001839.
3. IDENTIFY USING NASA DRAWING NUMBER, REVISION LETTER AND MANUFACTURERS SYMBOL PER ND 1002019.



ITEM NO.	QTY REQD	SYM	GOVERNMENT/NASA NO.	KOLLSMAN PART NO.	CODE IDENT	NOMENCLATURE OR DESCRIPTION	MATERIAL	SPECIFICATION	UNIT WT
7	1	✓	1001715-125			RESISTOR (R103)			
6	2	✓	SEE NOTE 2			CAPACITOR (C103, C104)			
5	1	✓	1001715-123			RESISTOR (R104)			
4	2	✓	1001705-694			RESISTOR (R101, R102)			
3	2	✓	1001772-628			CAPACITOR (C101, C102)			
2	22	✓	1001840-3			TERMINAL			
1	1	✓	1022252	03386910285		TERMINAL BOARD			

-011 LIST OF PARTS AND MATERIALS

MASTER

NEXT ASSY	USED ON
1022837	1019970

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOL ON: FRACTIONS ± — DECIMALS ± — ANGLES ± —
DO NOT SCALE THIS DRAWING
MATERIAL —
CONTRACT

KOLLSMAN INSTRUMENT CORPORATION
ELMHURST NEW YORK
KIC PN 02386910127
DRAWN K. SMITH DATE 4-23-65
CHECKED 4-28-65
APPROVAL 4/30 65
APPROVAL
NASA APPROVAL
MIT APPROVAL

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

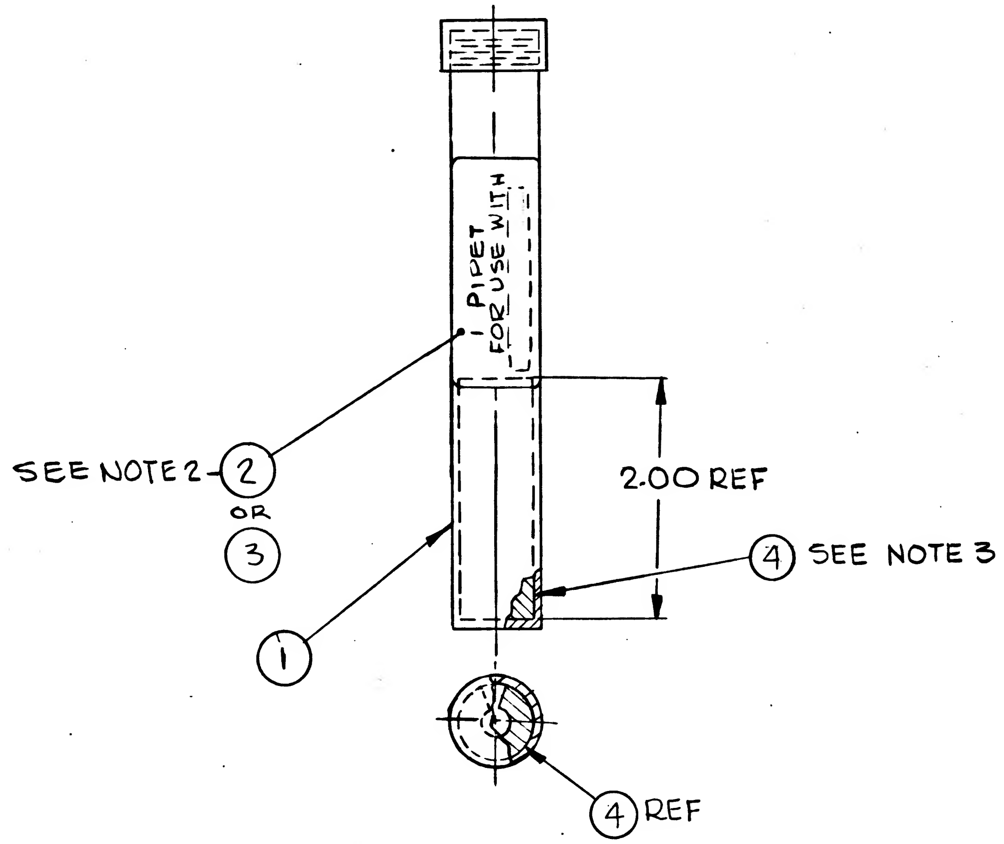
TITLE TERMINAL BOARD ASSY

CODE IDENT NO. 89944
SIZE C
NASA NUMBER 1022867
SCALE 1:1
WEIGHT CALC ACTUAL
SHEET 1 OF 1

AD-1340

REVISIONS 20503 6/28/65				
SYM	ZONE	DESCRIPTION	DATE	APPROVAL

NOTES:
1- INTERPRET DWG PER MIL-D-70327
2- APPLY IDENTIFICATION PLATE PER ND1002219.
3- CEMENT USING EC1357 ADHESIVE PER MIL-A-9067.
4- IDENTIFY USING NASA DWG NO., REVISION LETTER AND MANUFACTURER'S SYMBOL PER ND1002019 (BAGGED OR TAGGED)



QTY REQ	ITEM NO.	QTY REQD	SYM	GOVERNMENT/NASA NO.	KOLLSMAN PART NO.	CODE IDENT	NOMENCLATURE OR DESCRIPTION	MATERIAL	SPECIFICATION	UNIT WT
1	4	1		1022487	03386911554		FILLER			
1	3			1022380	03386911206		PLATE, IDENTIFICATION			
	2	1		1022379	03386911205		PLATE, IDENTIFICATION			
1	1	1		1001823	03386911082		VIAL, PLASTIC			
021		011		LIST OF PARTS AND MATERIALS						

1019984	1019984
NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES

TOL ON	FRACTIONS	DECIMALS	ANGLES
	± ~	± ~	± ~

DO NOT SCALE THIS DRAWING
MATERIAL
CONTRACT

KOLLSMAN INSTRUMENT CORPORATION
ELMHURST NEW YORK
KIC PN 023869103 55 THRU 0356
DRAWN T. LOMNITZ DATE 4-14-65
CHECKED N. Kerker 5-13-65
APPROVAL 5-3-6
APPROVAL
NASA APPROVAL 6-16-65
MIT APPROVAL 6-28-65

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

TITLE
TUBE ASSY

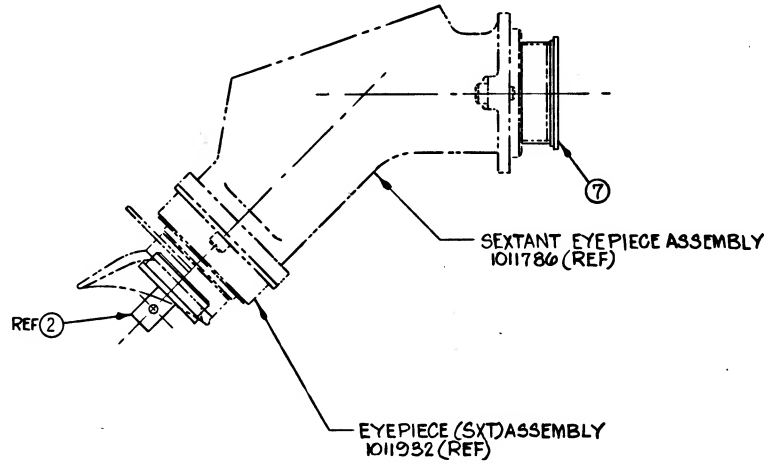
CODE IDENT NO. 89944
SIZE C
NASA NUMBER 1022879
SCALE NONE
WEIGHT CALC ACTUAL
SHEET 1 OF 1

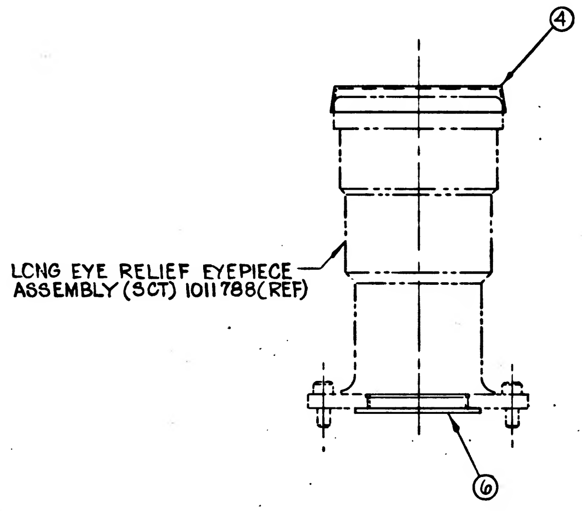
MASTER

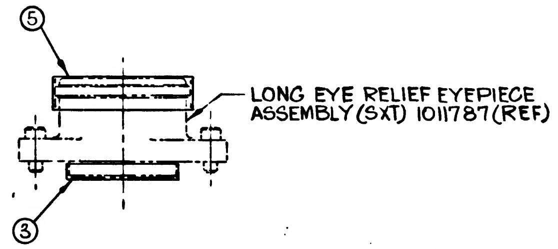
WA

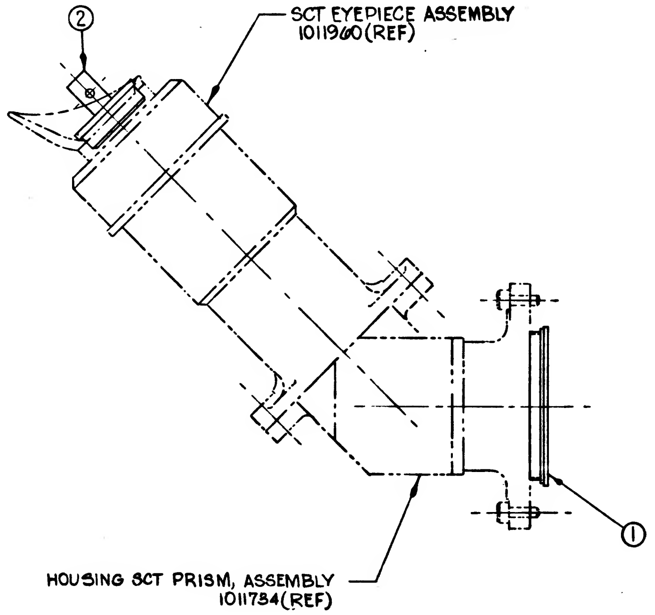
REVISIONS 23053				
SYM	ZONE	DESCRIPTION	DATE	APPROVAL
		CLASS A RELEASE PER TDRR		

NOTES:
1. INTERPRET DWG PER MIL-D-70327


⑦
SEXTANT EYEPIECE ASSEMBLY 1011786 (REF)
REF ②
EYEPIECE (SXT) ASSEMBLY 1011932 (REF)






②
SCT EYEPIECE ASSEMBLY 1011960 (REF)
①
HOUSING SCT PRISM, ASSEMBLY 1011784 (REF)

*VENDOR ITEM: SEE SOURCE CONTROL OR SPECIFICATION CONTROL DRAWING

ITEM NO.	QTY REQD	SYM	GOVERNMENT/NASA NO.	KOLLSMAN PART NO.	CODE IDENT	NOMENCLATURE OR DESCRIPTION	MATERIAL	SPECIFICATION	UNIT WT
7	1	*	1001886-1	03386911332		COVER, LENS			
6	—		1022334	03386911328		COVER, LENS (LONG EYE RELIEF SCT)			
5	—		1022331	03386911325		COVER, LENS (LONG EYE RELIEF SXT)			
4	—		1022335	03386911329		COVER, LENS (LONG EYE RELIEF SCT)			
3	—		1022333	03386911327		COVER, LENS (LONG EYE RELIEF SXT)			
2	2		1022332	03386911326		COVER, LENS (SXT & SCT EYEPIECE)			
1	1		1022336	03386911330		COVER, LENS (HOUSING SCT PRISM)			
	011	LIST OF PARTS AND MATERIALS							

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOL ON FRACTIONS ± — DECIMALS ± — ANGLES ± —
DO NOT SCALE THIS DRAWING
MATERIAL —

NEXT ASSY | USED ON
APPLICATION

CONTRACT NAS9-497

KOLLSMAN INSTRUMENT CORPORATION
ELMHURST NEW YORK
KIC PN 01386910055
DRAWN E.J. ROHL DATE 5-14-65
CHECKED 6-1965
APPROVAL 7-7-65
APPROVAL
NOT REQUIRED PER LETTER NASA-PMO 65-612
MIT APPROVAL

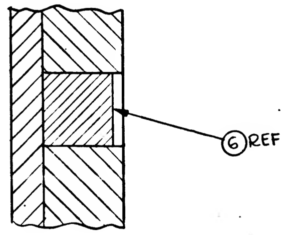
MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

TITLE
LENS COVERS SET

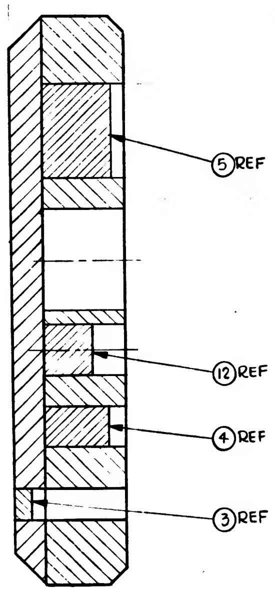
CODE IDENT NO. 89944
SIZE E
NASA NUMBER 1022880
SCALE 1/1
WEIGHT CALC ACTUAL
SHEET 1 OF 1

REVISIONS 20503			6-28-65	
SYM	ZONE	DESCRIPTION	DATE	APPROVAL

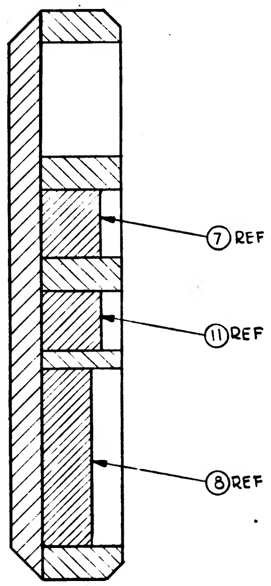
NOTES:
1. INTERPRET DRAWING PER MIL-D-70327.
2. CEMENT ALL ITEMS TOGETHER AS SHOWN WITH MIL-A-5092B, TYPE II PER MIL-A-9067
3. COAT ALL OVER, EXCEPT SURFACES MARKED "X" WITH POLYVINYL CHLORIDE (COPOLYMER) SPRAY, RUBATEX CORP., BEDFORD, VA., PART NO. 19326 (BLACK).
4. IDENTIFY USING NASA DRAWING NUMBER, REVISION LETTER AND MANUFACTURER'S SYMBOL PER ND1002019 (BAGGED).



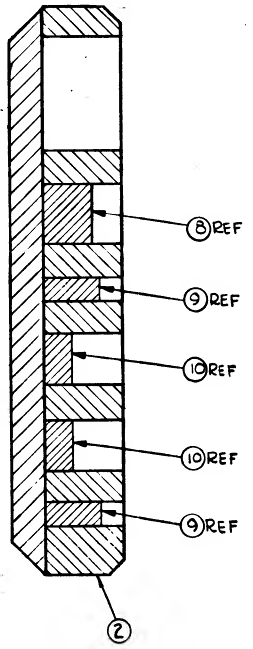
PARTIAL SECTION D-D



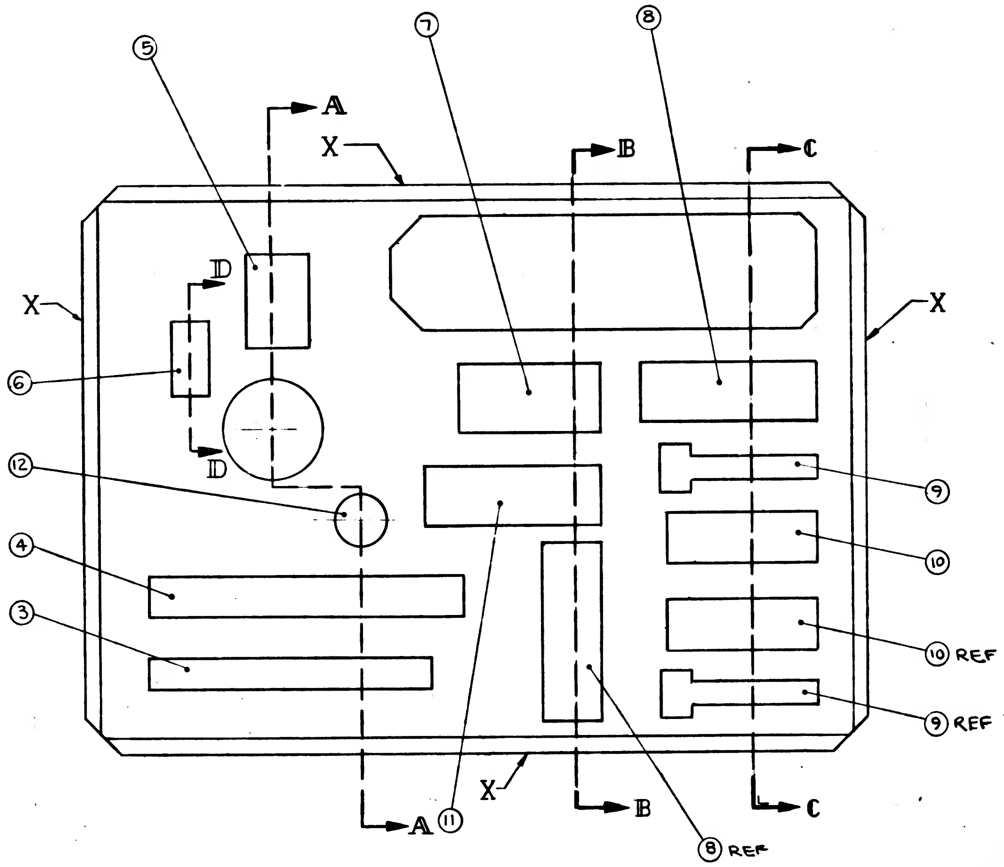
SECTION A-A

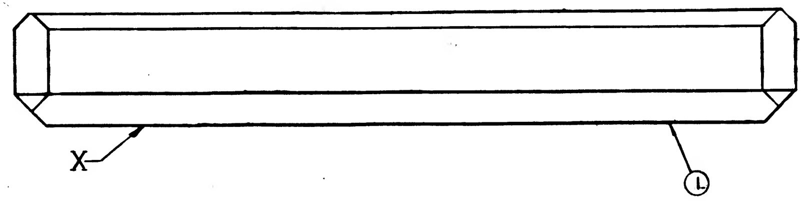


SECTION B-B



SECTION C-C





ITEM NO.	QTY REQD	SYM	GOVERNMENT/NASA NO.	KOLLSMAN PART NO.	CODE IDENT	NOMENCLATURE OR DESCRIPTION	MATERIAL	SPECIFICATION	UNIT WT
12	1		1022316	03386911174		PAD, CUSHION (LOUPE)			
11	1		1022339	03386911269		FILLER, LOWER (STATIC ELIMINATOR BRUSH			
10	2		1022315	03386911173		PAD, CUSHION, LOWER (BOTTLES)			
9	2		1022343	03386911253		FILLER, LOWER, (PIPETS)			
8	2		1022340	03386911251		FILLER, LOWER (GLOVES & SYRINGE)			
7	1		1022347	03386911255		FILLER, LOWER (FILLING VALVES)			
6	1		1022342	03386911267		FILLER, LOWER (GAUGE REGULATOR)			
5	1		1022345	03386911266		FILLER, LOWER (REGULATOR)			
4	1		1022359	03386911258		FILLER, LOWER (STRAIGHT EDGE)			
3	1		1022344	0338691126A		FILLER, LOWER (LENS TISSUE)			
2	1		1022338	03386911273		PAD, CUSHION, BASE			
1	1		1022337	03386911272		PAD, CUSHION, LOWER			
	-011	LIST OF PARTS AND MATERIALS							

NEXT ASSY	USED ON
1022882	1019984

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOL ON FRACTIONS ± / DECIMALS ± / ANGLES ± /
DO NOT SCALE THIS DRAWING
MATERIAL
CONTRACT

KOLLSMAN INSTRUMENT CORPORATION
ELMHURST NEW YORK
KIC PN 0238691034
DRAWN B Culver DATE 5-65
CHECKED N Keyes 5-7-65
APPROVAL
APPROVAL
NASA APPROVAL
MIT APPROVAL

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

TITLE
BASE CUSHION PAD ASSEMBLY

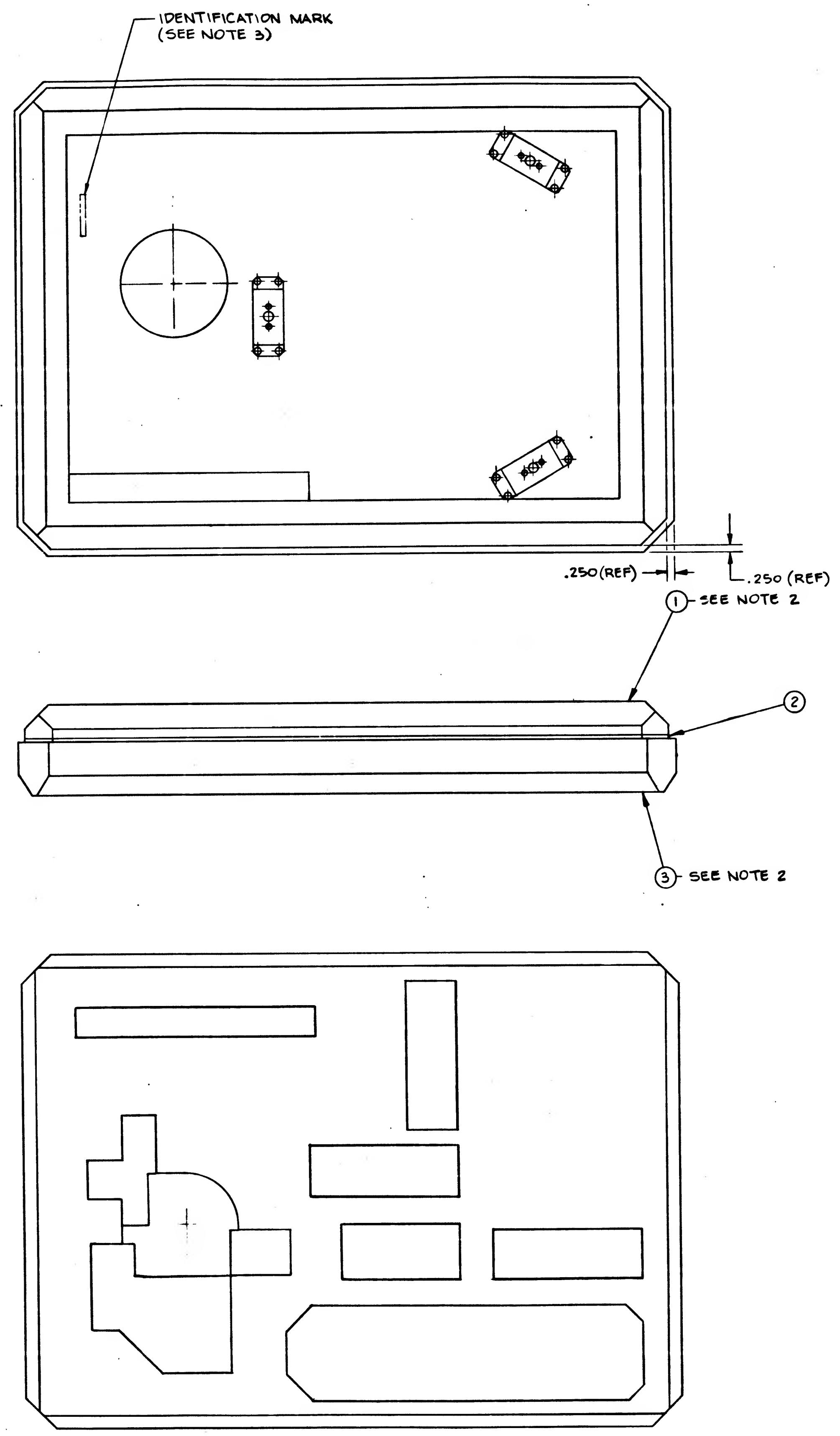
CODE IDENT NO. 89944
SIZE E
NASA NUMBER 1022883
SCALE 1 : 2
WEIGHT
CALC ACTUAL
SHEET 1 OF 1

MASTER

SYM	ZONE	REVISIONS 20503 DESCRIPTION	DATE 6-25-65	APPROVAL

NOTES:

1. INTERPRET DWG PER MIL-D-70327.
2. CEMENT ITEMS 1 AND 3 TO ITEM 2 USING MIL-A-5092B, TYPE II PER MIL-A-9069. ITEM 2 TO BE CENTRALIZED ON ITEM 3 AS SHOWN.
3. IDENTIFY USING NASA DRAWING NUMBER, REVISION LETTER AND MANUFACTURER'S SYMBOL PER ND 1002019.



ITEM NO.	QTY REQD	SYM	GOVERNMENT/NASA NO.	KOLLSMAN PART NO.	CODE IDENT	NOMENCLATURE OR DESCRIPTION	MATERIAL	SPECIFICATION	UNIT WT
3	1		1022886-011	02386910362		COVER CUSHION PAD ASSY			
2	1		1022885-011	02386910365		SHELF ASSY			
1	1		1022 349	03386911274		PAD, CUSHION, UPPER			
	011	LIST OF PARTS AND MATERIALS							

NEXT ASSY	USED ON
1022 882	1019984

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOL ON FRACTIONS ± ~ DECIMALS ± ~ ANGLES ± ~
DO NOT SCALE THIS DRAWING
MATERIAL
CONTRACT

KOLLSMAN INSTRUMENT CORPORATION
ELMHURST NEW YORK
KIC PN 02386910366
DRAWN AJ PERALTA DATE 5-6-65
CHECKED N. Kettler 5-7-65
APPROVAL
APPROVAL
NASA APPROVAL 6-18-65
MIT APPROVAL 6-18-65

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

TITLE
COVER PAD AND SHELF
ASSEMBLY

CODE IDENT NO. 89944
SIZE E
NASA NUMBER 1022884
SCALE 1:2
WEIGHT CALC ACTUAL
SHEET 1 OF 1

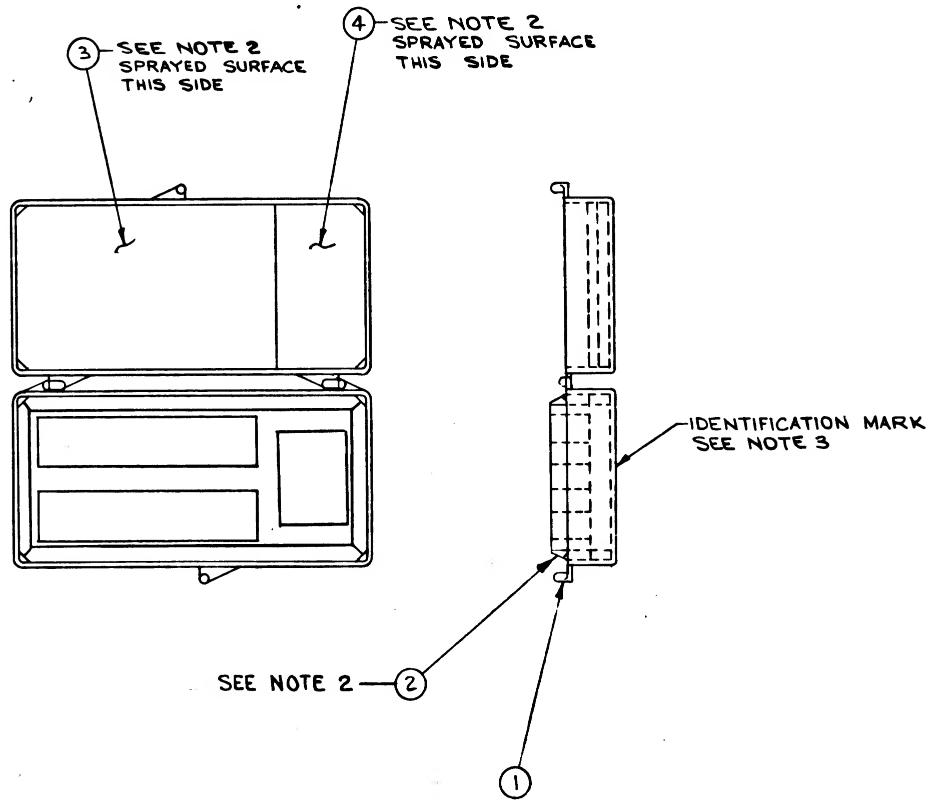
MASTER

1022884

REVISIONS 20533			6-28-65	
SYM	ZONE	DESCRIPTION	DATE	APPROVAL

NOTES:

1. INTERPRET DWG PER MIL-D-70327.
2. CEMENT ITEMS 2,3 AND 4 IN PLACE, USING EC-1357 ADHESIVE PER MIL-A-9067
3. IDENTIFY USING NASA DRAWING NUMBER, REVISION LETTER AND MANUFACTURER'S SYMBOL PER ND 1002019.



③ SEE NOTE 2 SPRAYED SURFACE THIS SIDE
④ SEE NOTE 2 SPRAYED SURFACE THIS SIDE
IDENTIFICATION MARK SEE NOTE 3
SEE NOTE 2 ②
①

ITEM NO.	QTY REQD	SYM	GOVERNMENT/NASA NO.	KOLLSMAN PART NO.	CODE IDENT	NOMENCLATURE OR DESCRIPTION	MATERIAL	SPECIFICATION	UNIT WT
4	1		1022367	03386911236		PAD, CUSHION			
3	1		1022366	03386911237		PAD, CUSHION			
2	1		1022895-011	02386910336		PAD, CUSHION ASSY			
1	1		1001869	03386911240		BOX, PLASTIC			
	D11	LIST OF PARTS AND MATERIALS							

NEXT ASSY	USED ON
1022881	1019984

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOL ON FRACTIONS ± — DECIMALS ± — ANGLES ± —
DO NOT SCALE THIS DRAWING
MATERIAL
CONTRACT

KOLLSMAN INSTRUMENT CORPORATION
ELMHURST NEW YORK
KIC PN 02386910337
DRAWN M. SCHORR DATE 4-30-65
CHECKED N. Ketzko 5-5-65
APPROVAL [illegible] 5-6-65
APPROVAL
NASA APPROVAL [illegible] 6-16-65
MIT APPROVAL [illegible] 6-18-65

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

TITLE
STORAGE BOX
ASSY

CODE IDENT NO. 89944
SIZE D
NASA NUMBER 1022888
SCALE 1/1
WEIGHT CALC ACTUAL
SHEET 1 OF 1

WA

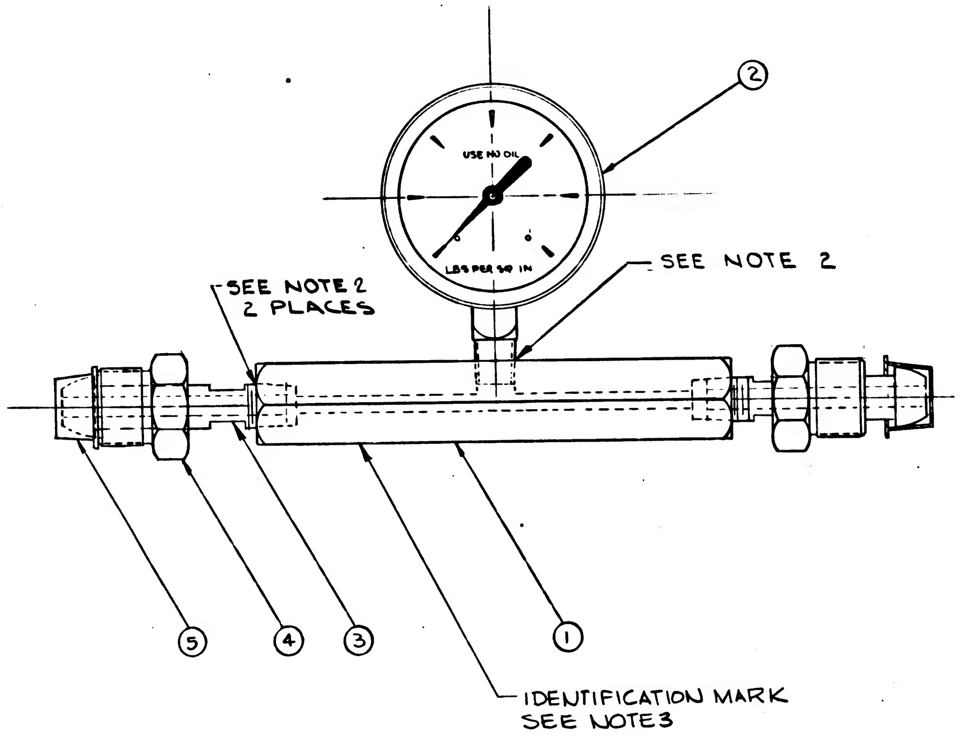
MASTER

1022888

REVISIONS 20503			6-28-65	
SYM	ZONE	DESCRIPTION	DATE	APPROVAL

NOTES:

1. INTERPRET DRAWING PER MIL-D-70327
2. APPLY SEALING COMPOUND SEALTITE, MEDIUM WEIGHT, TO THREADED CONNECTION BEFORE ASSEMBLING.
3. IDENTIFY USING NASA DWG NO., REVISION LETTER AND MANUFACTURER'S SYMBOL PER ND1002019.



ITEM NO.	QTY REQD	SYM	GOVERNMENT/NASA NO.	KOLLSMAN PART NO.	CODE IDENT	NOMENCLATURE OR DESCRIPTION	MATERIAL	SPECIFICATION	UNIT WT
5	2		1001773-002	03386910053-2		PLUG, CAP			
4	2		1001854	03386911186		NUT, ADAPTER			
3	2		1001855	03386911187		NIPPLE			
2	1		1001856	03386911188		GAUGE, HIGH PRESSURE			
1	1		1022368	03386910270		COUPLING			
	011								

LIST OF PARTS AND MATERIALS

NEXT ASSY	USED ON
1019984	1019984

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOL ON FRACTIONS ± / DECIMALS ± / ANGLES ± /
DO NOT SCALE THIS DRAWING
MATERIAL —
CONTRACT

KOLLSMAN INSTRUMENT CORPORATION
ELMHURST NEW YORK
KIC PN 02386910316
DRAWN B. Pulver DATE 4/22/65
CHECKED N. K[illegible] 5-5-65
APPROVAL [illegible] 5-6-65
APPROVAL
NASA APPROVAL A. C. [illegible]
MIT APPROVAL [illegible] 6-28-65

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

TITLE
FILLING FIXTURE,
NITROGEN CYLINDER

CODE IDENT NO. 89944
SIZE D
NASA NUMBER 1022889
SCALE 1:1
WEIGHT CALC ACTUAL
SHEET 1 OF 1

WA

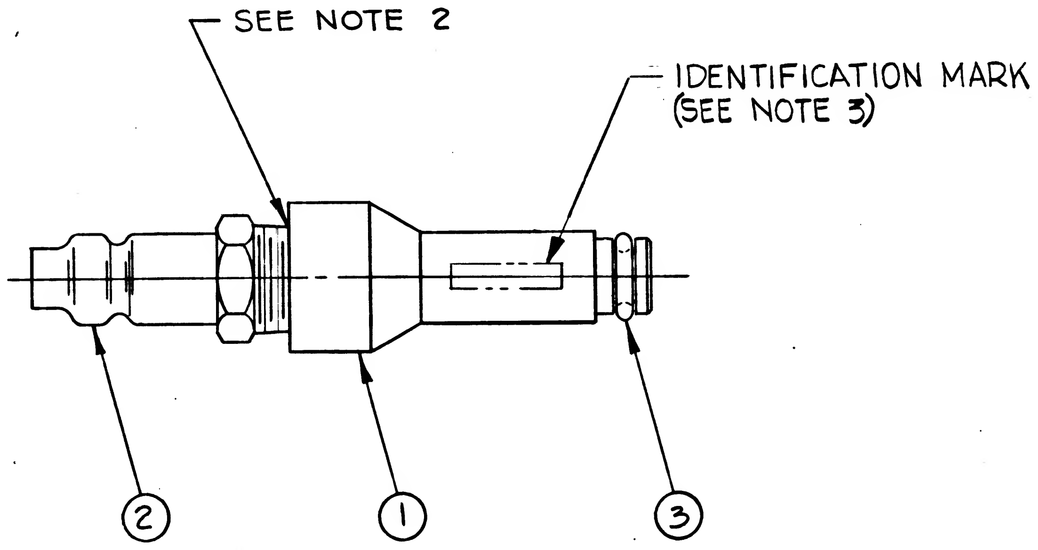
1022889

AD-1380

REVISIONS 20503 6/28/65				
SYM	ZONE	DESCRIPTION	DATE	APPROVAL

NOTES:

1. INTERPRET DWG PER MIL-D-70327.
2. APPLY SEALING COMPOUND "SEALTITE", MEDIUM WEIGHT, TO THREAD CONNECTION BEFORE ASSEMBLING.
3. IDENTIFY USING NASA DWG NO., REVISION LETTER AND MANUFACTURER'S SYM PER ND1002019



ITEM NO.	QTY REQD	SYM	GOVERNMENT/NASA NO.	KOLLSMAN PART NO.	CODE IDENT	NOMENCLATURE OR DESCRIPTION	MATERIAL	SPECIFICATION	UNIT WT
3	1		MS28775-008	74453020008		PACKING, PREFORMED ("O" RING)			
2	1		1001880	03386911322		PLUG			
1	1		1022369	03386911313		FITTING, GAS INJECTION			
	011	LIST OF PARTS AND MATERIALS							

NEXT ASSY	USED ON
1022881	1019984
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES

TOL ON	FRACTIONS	DECIMALS	ANGLES
	+ −	+ −	+ −

DO NOT SCALE THIS DRAWING
MATERIAL
CONTRACT

KOLLSMAN INSTRUMENT CORPORATION
ELMHURST NEW YORK
KIC IN 02386910374

DRAWN AJ PERALTA DATE 5-8-65
CHECKED N. Ketzler 5-10-65
APPROVAL W. Wegener 5-11-65
APPROVAL
NASA APPROVAL A.C. Wetzel
W. Lindt 6-16-65
MIT APPROVAL 6-22-65

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

TITLE
GAS INJECTION FITTING
ASSEMBLY

CODE IDENT NO.	SIZE	NASA NUMBER
89944	C	1022890

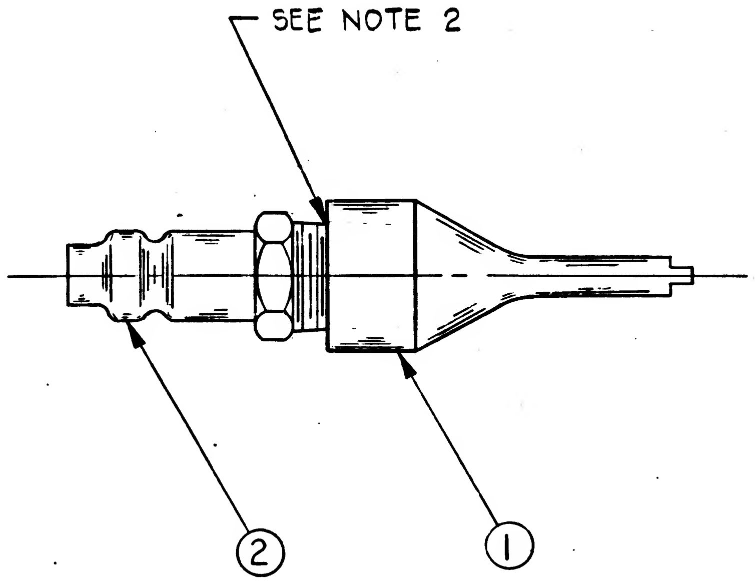
SCALE 2:1 WEIGHT CALC ACTUAL SHEET 1 OF 1

MASTER

wA

REVISIONS 20503 6/28/65				
SYM	ZONE	DESCRIPTION	DATE	APPROVAL

NOTES:
1-INTERPRET DRAWING PER MIL-D-70327
2-APPLY SEALING COMPOUND SEALTITE, MEDIUM WEIGHT, TO THREAD CONNECTION BEFORE ASSEMBLING
3-IDENTIFY USING NASA DRAWING NUMBER, REVISION LETTER AND MANUFACTURERS SYMBOL PER ND 1002019 (BAGGED OR TAGGED).



ITEM NO.	QTY REQD	SYM	GOVERNMENT/NASA NO.	KOLLSMAN PART NO.	CODE IDENT	NOMENCLATURE OR DESCRIPTION	MATERIAL	SPECIFICATION	UNIT WT
2	1		1001880	03386911322		PLUG			
1	1		1022371	03386911279		FITTING, GAS INJECTION			
	011	LIST OF PARTS AND MATERIALS							

1019984	1019984
NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES

TOL ON	FRACTIONS	DECIMALS	ANGLES
	+ −	+ −	+ −

DO NOT SCALE THIS DRAWING
MATERIAL —
CONTRACT

KOLLSMAN INSTRUMENT CORPORATION
ELMHURST NEW YORK
KIC PN 02386910373
DRAWN A.S. Arildolfi DATE 5-7-65
CHECKED N. Getz 5-7-65
APPROVAL [illegible] 5-7-65
APPROVAL
NASA APPROVAL O.C. Mitz
Wheh dt 6-16-65
MIT APPROVAL M. Murley 6-28-65

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

TITLE
FITTING,
GAS INJECTION ASSY

CODE IDENT NO. 89944
SIZE C
NASA NUMBER 1022891
SCALE 2:1
WEIGHT CALC ACTUAL
SHEET 1 OF 1

MASTER

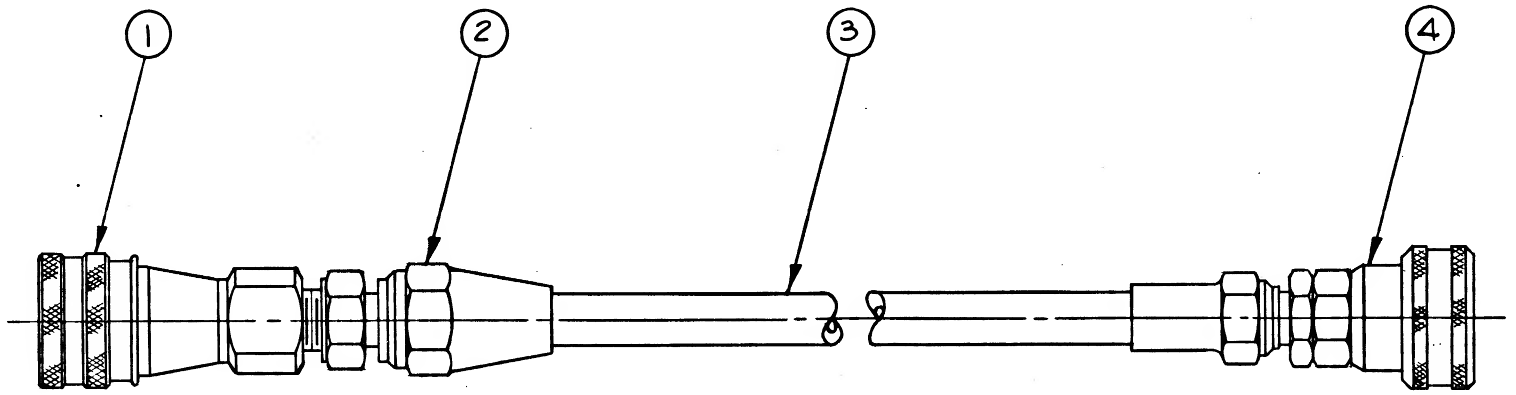
AD-1340

WA

REVISIONS 20503 6/28/65				
SYM	ZONE	DESCRIPTION	DATE	APPROVAL

NOTES:

1. INTERPRET DWG PER MIL-D-70327.
2. APPLY SEALING COMPOUND "SEALTITE" (MEDIUM WEIGHT) TO THREADED CONNECTIONS BEFORE ASSEMBLING.
3. IDENTIFY USING NASA DWG NO., REVISION LETTER AND MANUFACTURER'S SYMBOL PER ND 1002019.



ITEM NO.	QTY REQD	SYM	GOVERNMENT/NASA NO.	KOLLSMAN PART NO.	CODE IDENT	NOMENCLATURE OR DESCRIPTION	MATERIAL	SPECIFICATION	UNIT WT
4	1		1001774	03386910054		COUPLING, QUICK CONNECT			
3	1		MIL-H-5593-3			HOSE (.187 I D x .437 O D x 10 FT LONG)			
2	1		1001881	02386910381		HOSE CLAMP			
1	1		1001878	03386911317		SOCKET			
	011								

LIST OF PARTS AND MATERIALS

NEXT ASSY	USED ON
1022881	1019984

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES

TOL ON	FRACTIONS	DECIMALS	ANGLES
	± —	± —	± —

DO NOT SCALE THIS DRAWING

MATERIAL

CONTRACT

KOLLSMAN INSTRUMENT CORPORATION
ELMHURST NEW YORK
KIC PN 02386910361

DRAWN AJ PERALTA DATE 5-4-65
CHECKED N. Kessler 5-7-65
APPROVAL 5-7-65
APPROVAL

NASA APPROVAL
6-14-65
MIT APPROVAL 6-28-65

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

TITLE
HOSE ASSEMBLY

CODE IDENT NO.	SIZE	NASA NUMBER
89944	C	1022892

SCALE 1:1 WEIGHT CALC ACTUAL SHEET 1 OF 1

1022892

MASTER

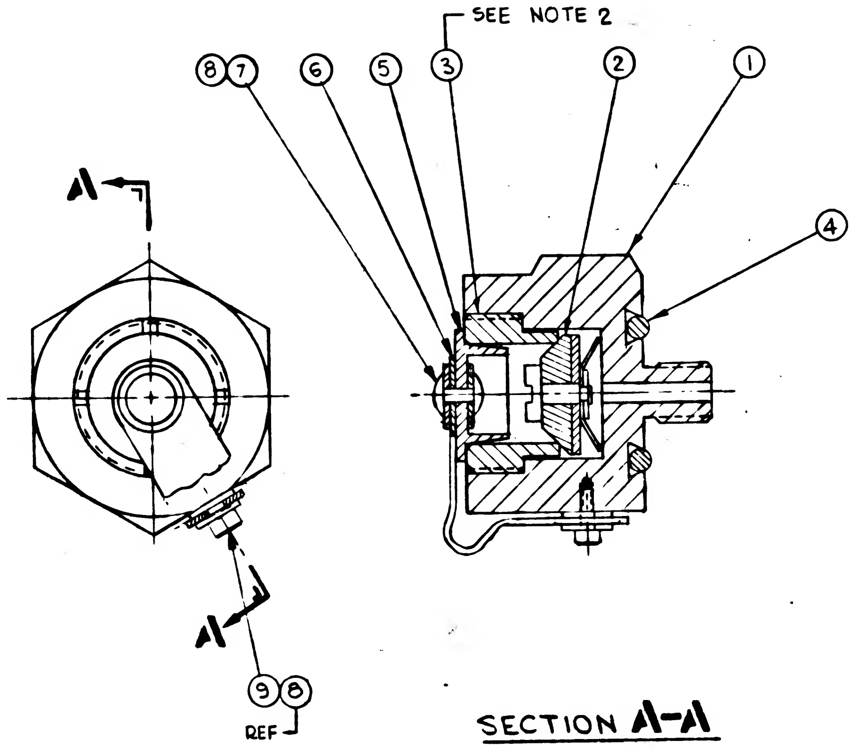
AD-1340

WA

REVISIONS 20523				6-28-65
SYM	ZONE	DESCRIPTION	DATE	APPROVAL
A		REVISED PER ECO 111958 TDRR 21710 8-19-65	HEB 9-17-65	9-20-65

NOTE:

1. INTERPRET DWG PER MIL-D-70327.
2. VACUUM SEAL AND VIBRATION PROOF ITEM 5 TO ITEM 1 IN ACCORDANCE WITH ND1002211 USING MIL-S-22473 GRADE "H".
3. IDENTIFY USING NASA DWG NO. REVISION LETTER AND MANUFACTURER'S SYMBOL PER ND1002019 (BAGGED OR TAGGED)



SECTION A-A

ITEM NO.	QTY REQD	SYM	GOVERNMENT/NASA NO.	KOLLSMAN PART NO.	CODE IDENT	NOMENCLATURE OR DESCRIPTION	MATERIAL	SPECIFICATION	UNIT WT
9	1		MS16996-1			SCREW, CAP, SOCKET HD			
8	4		MS15795-301			WASHER			
Ⓐ 7	1		MS20470A2-3	7445402100l		RIVET, SOLID-UNIVERSAL			
6	1		1022431-002	0338691392		STRAP			
5	1		1022430	0338691391		PLUG, CAP			
4	1		MS28775-012	74453020012		PACKING, PREFORMED ("O" RING)			
3	1		1022378	03386911308		NUT, RETAINING			
2	1		1022894-011	02386910372		PLUNGER ASSEMBLY			
1	1		1022372	03386911298		ADAPTER, HOUSING			
	-011	LIST OF PARTS AND MATERIALS							

NEXT ASSY	USED ON
1019984	1019984

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOL ON: FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING
MATERIAL ~
CONTRACT NAS 9-497

KOLLSMAN INSTRUMENT CORPORATION
ELMHURST NEW YORK
KIC PN 02386910380
DRAWN M. SCHORR DATE 5-7-65
CHECKED U. Kebler 5-12-65
APPROVAL
APPROVAL
NASA APPROVAL
MIT APPROVAL 6-25-65

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

TITLE
GAS INJECTION VALVE
ASSY

CODE IDENT NO. 89944
SIZE D
NASA NUMBER 1022893
SCALE 4/1
WEIGHT CALC ACTUAL
SHEET 1 OF 1

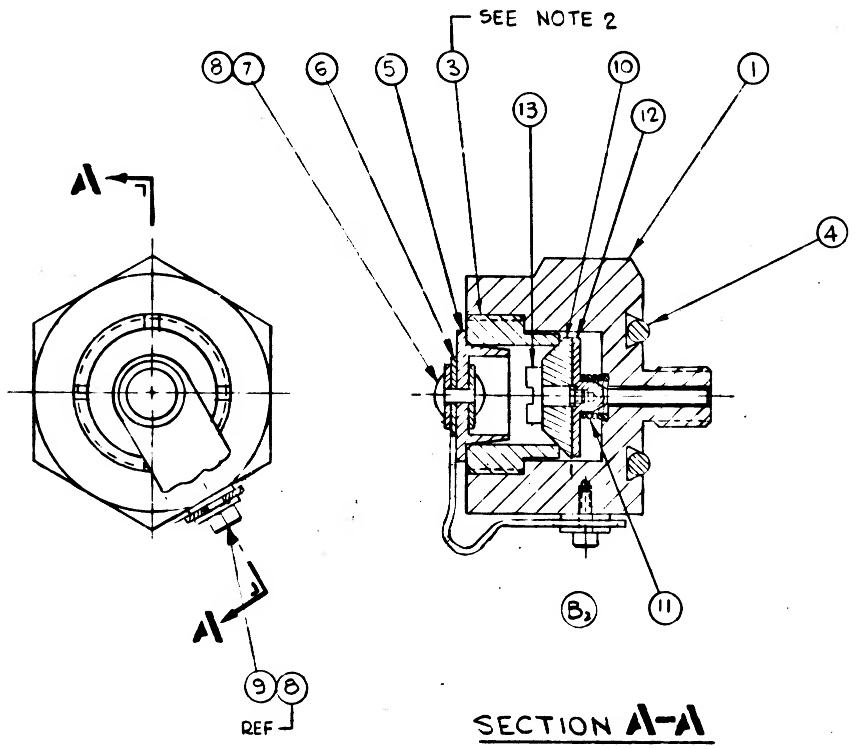
AD-1390

MASTER

NOTE:

1. INTERPRET DWG PER MIL-D-70327.
2. VACUUM SEAL AND VIBRATION PROOF ITEM 3 TO ITEM 1 IN ACCORDANCE WITH ND1002211 USING MIL-S-22473 GRADE "H".
3. IDENTIFY USING NASA DWG NO. REVISION LETTER AND MANUFACTURER'S SYMBOL PER ND1002019 (BAGGED OR TAGGED)

REVISIONS 20503 6-28-6				
SYM	ZONE	DESCRIPTION	DATE	APPROVAL
(M) A		REVISED PER ECC 111958 TDRR 21710 8-19-65	HF 3 9-17-65	9-20-65
B₃		REVISED PER ECO 116079 TDRRG27627 DATE 3-14-66	JPD 3-20-66	BJR 3/30/66



SECTION A-A

	1	13	–		1022635	03386912150		SCREW			
	1	12	–		1022639	03386912151		VALVE, NEEDLE			
(A)	1	11	–		1022633	03386912148		SPRING, HELICAL, COMPRESSION			
	1	10	–		1022374	03386911300		PLUG			
(B₁)	1	9	1		MS16996-1			SCREW, CAP, SOCKET HD			
	4	8	4		MS15795-301			WASHER			
	1	7	1		MS20470A2-3	74454021001		RIVET, SOLID-UNIVERSAL			
	1	6	1		1022431-002	03386911392		STRAP			
	1	5	1		1022430	03386911391		PLUG, CAP			
	1	4	1		MS28775-012	74453020012		PACKING, PREFORMED ("O" RING)			
	1	3	1		1022378	03386911308		NUT, RETAINING			
	–	2	1		1022894-011	02386910372		PLUNGER ASSEMBLY			
	1	1	1		1022372	03386911298		ADAPTER, HOUSING			
	QTY REQD	ITEM NO.	QTY REQD	SYM	GOVERNMENT/NASA NO.	KOLLSMAN PART NO.	CODE IDENT	NOMENCLATURE OR DESCRIPTION	MATERIAL	SPECIFICATION	UNIT WT
	-021		-011	LIST OF PARTS AND MATERIALS							

1019984	1019984
6014056	6014056
1022980	1022980
NEXT ASSY	USED ON
APPLICATION	

(B₃)

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOL ON FRACTIONS ± — DECIMALS ± — ANGLES ± —
DO NOT SCALE THIS DRAWING
MATERIAL ~
CONTRACT NAS 9-497

KOLLSMAN INSTRUMENT CORPORATION
ELMHURST NEW YORK
KIC PN 023869 0390
DRAWN M. SCHORR DATE 5-7-65
CHECKED N. Ketzler 5-12-65
APPROVAL
APPROVAL
NASA APPROVAL
MIT APPROVAL

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

TITLE
GAS INJECTION VALVE
ASSY

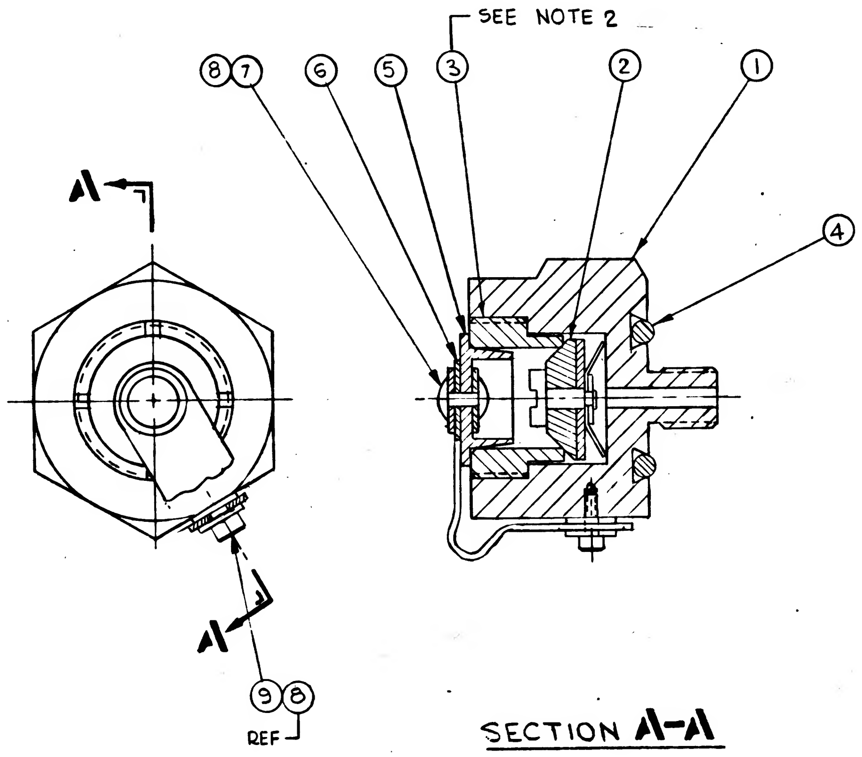
CODE IDENT NO. 89944
SIZE D
NASA NUMBER 1022893
SCALE 4/1
WEIGHT CALC ACTUAL
SHEET 1 OF 1

AD-1350

REVISIONS 20503				6-28-65
SYM	ZONE	DESCRIPTION	DATE	APPROVAL

NOTE:

1. INTERPRET DWG PER MIL-D-70327.
2. VACUUM SEAL AND VIBRATION PROOF ITEM 3 TO ITEM 1 IN ACCORDANCE WITH ND1002211 USING MIL-S-22473 GRADE "H".
3. IDENTIFY USING NASA DWG NO. REVISION LETTER AND MANUFACTURER'S SYMBOL PER ND1002019 (BAGGED OR TAGGED)



SECTION A-A

9	1		MS16996-1			SCREW, CAP, SOCKET HD			
8	4		MS15795-301			WASHER			
7	1		MS20470B2-3	7437000001		RIVET			
6	1		1022431-002	0338691392		STRAP			
5	1		1022430	0338691391		PLUG, CAP			
4	1		MS28775-012	74453020012		PACKING, PREFORMED ("O" RING)			
3	1		1022378	03386911308		NUT, RETAINING			
2	1		1022894-011	02386910372		PLUNGER ASSEMBLY			
1	1		1022372	03386911298		ADAPTER, HOUSING			
ITEM NO.	QTY REQD	SYM	GOVERNMENT/NASA NO.	KOLLSMAN PART NO.	CODE IDENT	NOMENCLATURE OR DESCRIPTION	MATERIAL	SPECIFICATION	UNIT WT
	-011	LIST OF PARTS AND MATERIALS							

1019984	1019984
NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOL ON FRACTIONS ± — DECIMALS ± — ANGLES ± —
DO NOT SCALE THIS DRAWING
MATERIAL
CONTRACT

KOLLSMAN INSTRUMENT CORPORATION
ELMHURST NEW YORK
KIC PN 023869.0380
DRAWN M. SCHORR DATE 5-7-65
CHECKED N. Ketzler 5-12-65
APPROVAL [illegible]
APPROVAL
NASA APPROVAL [illegible] 6-14-65
MIT APPROVAL [illegible] 6-25-65

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS
TITLE GAS INJECTION VALVE ASSY
CODE IDENT NO. 89944
SIZE D
NASA NUMBER 1022893
SCALE 4/1
WEIGHT CALC ACTUAL
SHEET 1 OF 1

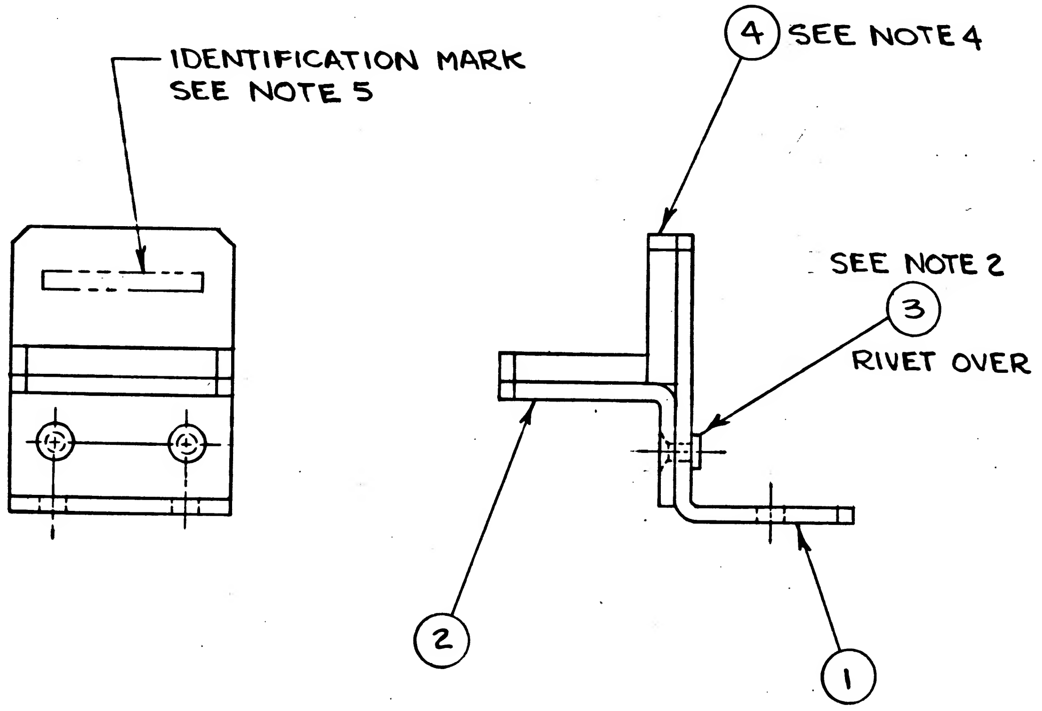
WA

REVISIONS 21728				
SYM	ZONE	DESCRIPTION	DATE	APPROVAL
	–	CLASS A RELEASE PER TDRR 21728		

NOTES:-

1- INTERPRET DWG PER MIL-D-70327
2- APPLY CHEMICAL FILM PER MIL-C-5541 GRADE C, CL 2 TO RIVETS AFTER RIVETING.

3- APPLY ONE COAT OF ZINC CHROMATE PRIMER PER MIL-P-8585 AND TWO COATS OF CASHMERE BLUE ENAMEL PER NASA DWG NO. 1016194 TO ALL SURFACES OF ITEMS 1, 2 AND 3 EXCEPT THOSE TO BE CEMENTED.
4- CEMENT ITEMS 4 IN PLACE WITH ADHESIVE PER MIL-A-5092, TYPE II.
5- IDENTIFY USING NASA DWG. NO. REV. LTR. AND MANUFACTURERS SYMBOL PER ND1002019 OPPOSITE SIDE SHOWN.



MASTER

ITEM NO.	QTY REQD	SYM	GOVERNMENT/NASA NO.	KOLLSMAN PART NO.	CODE IDENT	NOMENCLATURE OR DESCRIPTION	MATERIAL	SPECIFICATION	UNIT WT
4	2		1022391	03386911365		PAD, RUBBER			
3	2		MS20426-AD5-8	74454007042		RIVET, COUNTERSUNK HEAD			
2	1		1022387	03386911361		BRACKET, SUPPORT			
1	1		1022385	03386911359		SUPPORT, ANGLE			
	-011	LIST OF PARTS AND MATERIALS							

NEXT ASSY	USED ON
1019957	1019977
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOL ON: FRACTIONS ± ~ DECIMALS ± ~ ANGLES ± ~
DO NOT SCALE THIS DRAWING
MATERIAL —
CONTRACT NAS 9-497

KOLLSMAN INSTRUMENT CORPORATION
ELMHURST NEW YORK
KIC PN 02386910399
DRAWN H.E.BOLD DATE 5-14-65
CHECKED S. Saws 5-29-65
APPROVAL 6-7-65
APPROVAL
NASA APPROVAL
MIT APPROVAL

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

TITLE
SUPPORT ASSY

CODE IDENT NO. 89944
SIZE C
NASA NUMBER 1022909
SCALE 1/1
WEIGHT CALC ACTUAL
SHEET 1 OF 1

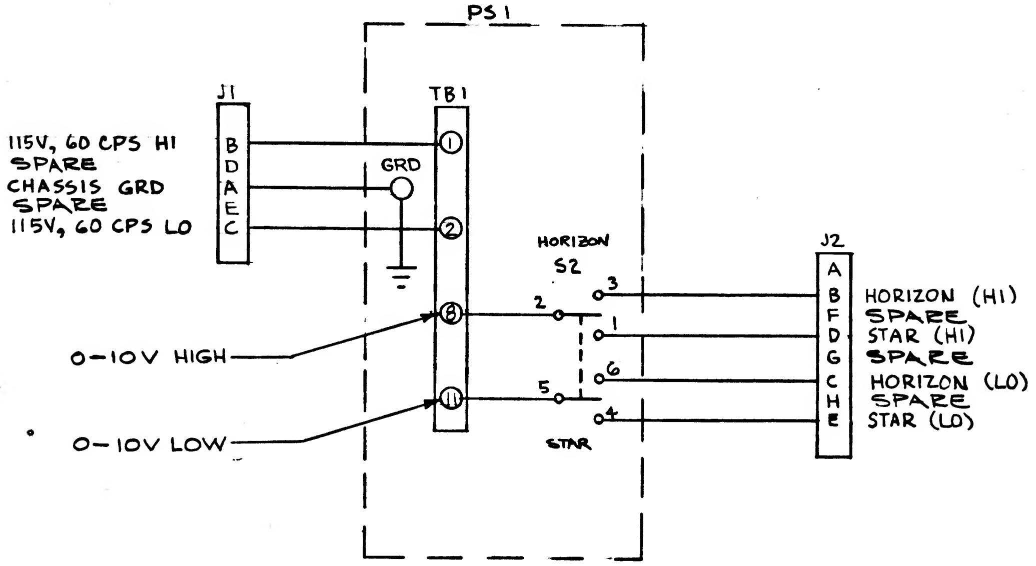
MASTER

AD-1340

REVISIONS 21721				
SYM	ZONE	DESCRIPTION	DATE	APPROVAL
—	—	CLASS A RELEASE PER TDRR		

NOTES:
1. INTERPRET DRAWING IN ACCORDANCE WITH MIL-D-70327.
2. PARTS LIST TO BE FOR REFERENCE ONLY.

REF DESIG	ZONE	SYM	GOVERNMENT/ NASA NO.	KOLLSMAN NO.	DESCRIPTION	VALUE	TOL	RATING
GRD			(PART OF PS1)		STUD, GROUND			
J1			MS3122E-14-5P		CONNECTOR			
J2			MS3122E-16-8S		CONNECTOR			
PS1					POWER SUPPLY, SUBASSY			
S2			MS25307-211		SWITCH			
TB1			(PART OF PS1)		TERMINAL BOARD			



REFERENCE DRAWINGS:
1. WIRING DIAGRAM 1022924
2. POWER SUPPLY ASSEMBLY 1022928

MASTER

ITEM NO.	QTY REQD	SYM	GOVERNMENT/NASA NO.	KOLLSMAN PART NO.	CODE IDENT	NOMENCLATURE OR DESCRIPTION	MATERIAL	SPECIFICATION	UNIT WT

LIST OF PARTS AND MATERIALS

NEXT ASSY	USED ON
1022928	1019977

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOL ON: FRACTIONS ± — ; DECIMALS ± — ; ANGLES ± —
DO NOT SCALE THIS DRAWING
MATERIAL —
CONTRACT NAS 9-497

KOLLSMAN INSTRUMENT CORPORATION
ELMHURST NEW YORK
KIC PN 02386910417
DRAWN J. MARGIOTTA DATE 5-24-65
CHECKED J. OSOFSKY 6-1-65
APPROVAL
APPROVAL
NASA APPROVAL
MIT APPROVAL

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

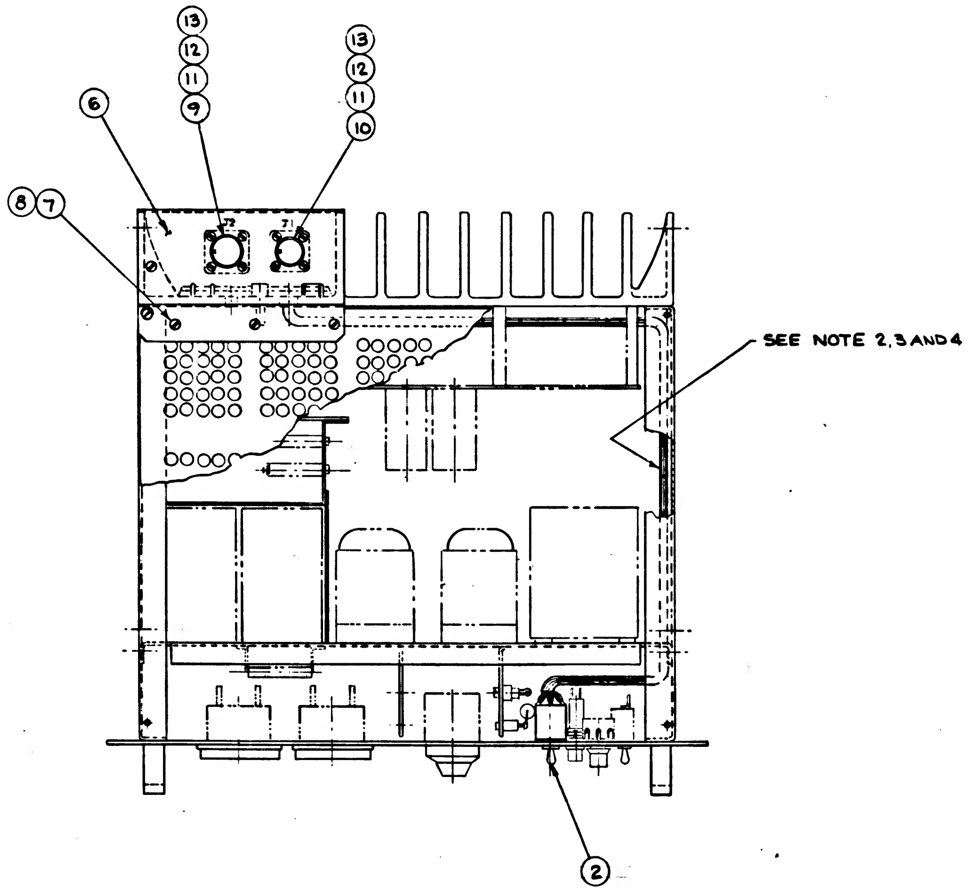
TITLE
POWER SUPPLY
STAR/HORIZON SIMULATOR
SCHEMATIC DIAGRAM

CODE IDENT NO. 89944
SIZE D
NASA NUMBER 1022923
SCALE NONE
WEIGHT
CALC ACTUAL
SHEET 1 OF 1

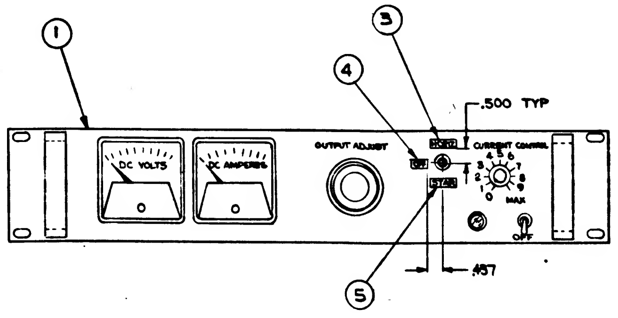
NOTES:
1. INTERPRET DWG PER MIL-D-70327.
2. WIRE PER ND1002032.
3. CRIMP PER ND1002206.
4. SOLDER PER ND1002071.
5. WIRE TO CONFORM TO ND1002181 TYPE I CLASS I, EXCEPT SEC. 4 (QUALITY ASSURANCE PROVISIONS)
6. CEMENT ITEMS 3, 4 AND 5 PER MIL-A-5092 TYPE III.
7. IDENTIFY USING NASA DRAWING NUMBER, REVISION LETTER AND MANUFACTURERS SYMBOL PER ND1002019. (BAGGED OR TAGGED)
8. WIRE PER ND 1002032
9. BIND WIRES TOGETHER APPROX EVERY ½" USING ITEM 15.

ITEM NO	PART NO.	AWG NO.	COLOR	LENGTH ± ½"	FROM COMPONENT	TO COMPONENT	SLEEVING
16	SEE NOTE 5	18	RED	10"	J1-A	PS1-GRD	
17		18	BLK	10"	J1-B	TB1-1	
18		18	BRN	10"	J1-C	TB1-2	
19		16	RED	35"	J2-B	S2-3	
20		16	BRN	35"	J2-C	S2-6	
21		16	GRN	35"	J2-D	S2-1	
22		16	ORN	35"	TB1-8	S2-2	
23		16	BLK	35"	J2-E	S2-4	
24	SEE NOTE 5	16	YEL	35"	TB1-11	S2-5	

REVISIONS 2, 7 2 1				
SYM	ZONE	DESCRIPTION	DATE	APPROVAL
—	—	CLASS A RELEASE PER TDRR		



REFERENCE DRAWINGS:
WIRING DIAGRAM: 1022924
SCHEMATIC: 1022923.



SEE CHART (items 16–24)

ITEM NO.	QTY REQD	SYM	GOVERNMENT/NASA NO.	KOLLSMAN PART NO.	CODE IDENT	NOMENCLATURE OR DESCRIPTION	MATERIAL	SPECIFICATION	UNIT WT
24			SEE NOTE 5	60601051605		WIRE, ELECT. (AWG 16, YEL)			
23				60601051601		WIRE, ELECT. (AWG 16, BLK)			
22				60601051604		WIRE, ELECT. (AWG 16, ORN)			
21				60601051606		WIRE, ELECT. (AWG 16, GRN)			
20				60601051602		WIRE, ELECT. (AWG 16, BRN)			
19				60601051603		WIRE, ELECT. (AWG 16, RED)			
18				60601051802		WIRE, ELECT. (AWG 18, BRN)			
17				60601051801		WIRE, ELECT. (AWG 18 BLK)			
16			SEE NOTE 5	60601051803		WIRE, ELECT. (AWG 18, RED)			
15	AR	*	1001670-2	60035037002		TAPE, LACING			
14	5		MS25036-1	68100003401		LUG, TERMINAL, CRIMP STYLE, INSULATED			
13	8		MS35649-44	61501051004		NUT, PLAIN HEX			
12	8		MS35337-78	74439050002		WASHER, SPLIT LOCK			
11	8		MS35233-13	74455185013		SCREW, PAN HEAD			
10	1		MS3122E-14-5P			CONNECTOR, ELECTRICAL RECEPTACLE			
9	1		MS3122E-16-8S			CONNECTOR, ELECTRICAL RECEPTACLE			
8	4		MS35337-79	74439050003		WASHER, SPLIT LOCK			
7	4		MS35233-26	74455185026		SCREW, PAN HEAD			
6	1		1022456	03386911445		BRACKET, CONNECTOR MOUNTING			
5	1		1022459	03386911455		PLATE, IDENTIFICATION			
4	1		1022458	03386911454		PLATE, IDENTIFICATION			
3	1		1022460	03386911456		PLATE, IDENTIFICATION			
2	1		MS25307-211			SWITCH, TOGGLE			
1	1		1022922	02386910413		POWER SUPPLY, D.C. REGULATED			
	-011	LIST OF PARTS AND MATERIALS							

* VENDOR ITEM - SEE SOURCE CONTROL OR SPECIFICATION DRAWING.

NEXT ASSY	USED ON
1022916	1019977

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOL ON: FRACTIONS ± ~ DECIMALS ± .015 ANGLES ± ~
DO NOT SCALE THIS DRAWING
MATERIAL ~
~
CONTRACT NAS 9-497

KOLLSMAN INSTRUMENT CORPORATION
ELMHURST NEW YORK
KIC PN 02386910415
DRAWN P. Dennis DATE 5/20/65
CHECKED 6-9-65
APPROVAL 6-9-65
APPROVAL
NASA APPROVAL
MIT APPROVAL

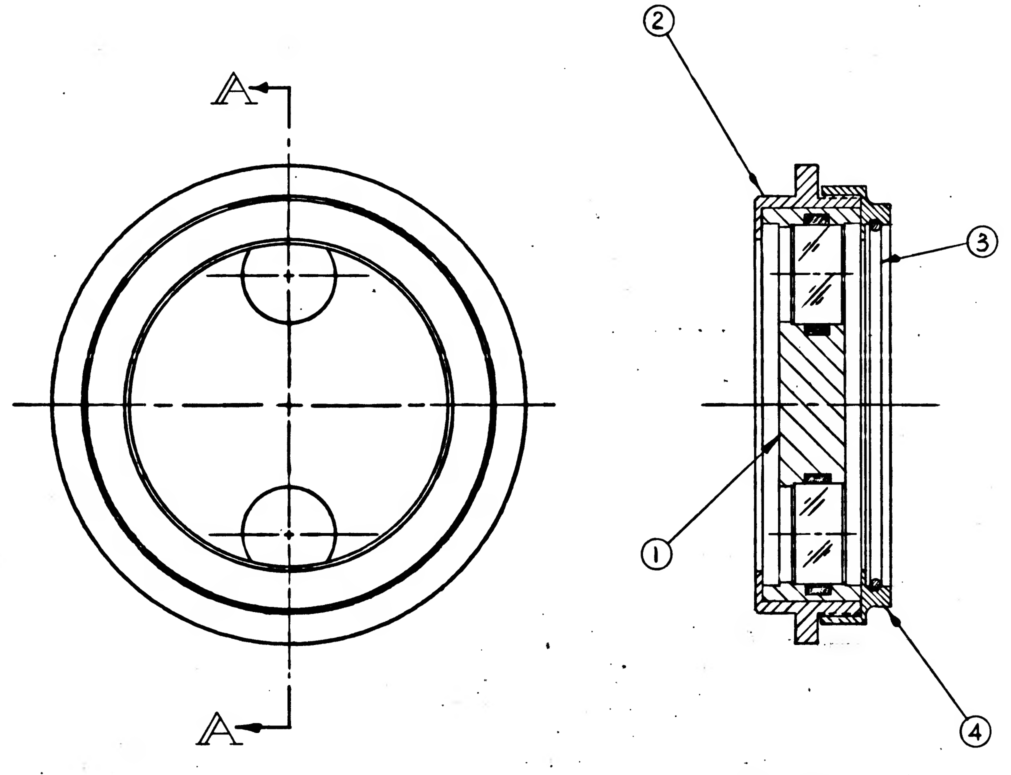
MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

TITLE
POWER SUPPLY
SUB-ASSEMBLY

CODE IDENT NO. 89944
SIZE E
NASA NUMBER 1022928
SCALE 1/2
WEIGHT CALC ACTUAL
SHEET 1 OF 1

REVISIONS 20/71				
SYM	ZONE	DESCRIPTION	DATE	APPROVAL

NOTES:
1. INTERPRET DWG PER MIL-D-70327
2. IDENTIFY USING NASA DRAWING NUMBER, REVISION LETTER AND MANUFACTURER'S SYM. PER ND-1002019 (BAGGED OR TAGGED)



SECTION A-A

ITEM NO.	QTY REQD	SYM	GOVERNMENT/NASA NO.	KOLLSMAN PART NO.	CODE IDENT	NOMENCLATURE OR DESCRIPTION	MATERIAL	SPECIFICATION	UNIT WT
4	1		1022466	03386911474		RING, RETAINING			
3	1		1022469	03386911497		RING, RETAINING			
2	1		1022467	03386911475		ADAPTER, CALIBRATION UNIT AND FILTER			
1	1		1022941-011	02386910383		ADAPTER, FILTER ASSY			
	-011	LIST OF PARTS AND MATERIALS							

NEXT ASSY	USED ON
1019896	1019970
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOL ON FRACTIONS ±~ DECIMALS ±~ ANGLES ±~
DO NOT SCALE THIS DRAWING
MATERIAL
CONTRACT

KOLLSMAN INSTRUMENT CORPORATION
ELMHURST NEW YORK
KIC PN 03386911475
DRAWN E.J. ROHL DATE 6-7-65
CHECKED 6-14-65
APPROVAL 6-14-65
APPROVAL
NASA APPROVAL
6-14-65
MIT APPROVAL 6-15-65

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

TITLE
FILTER AND LIGHT STOP ASSY

CODE IDENT NO. 89944
SIZE D
NASA NUMBER 1022933
SCALE 2/1
WEIGHT CALC ACTUAL
SHEET 1 OF 1

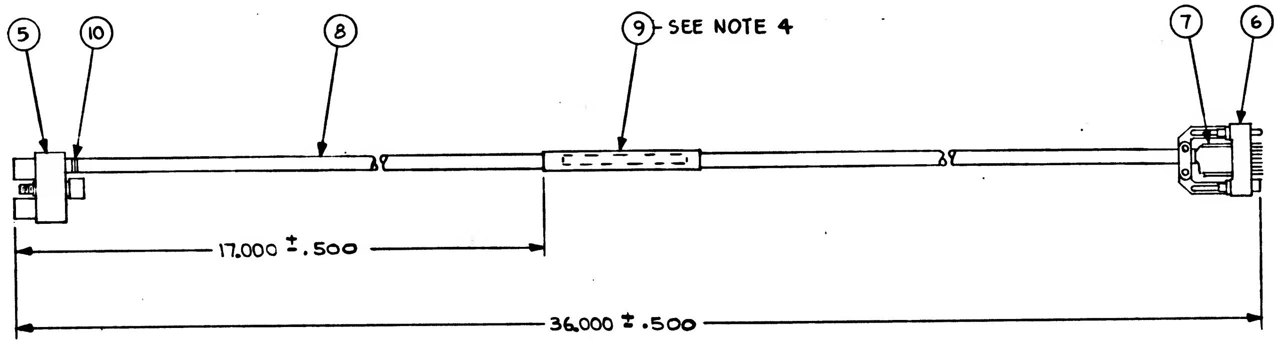
MASTER

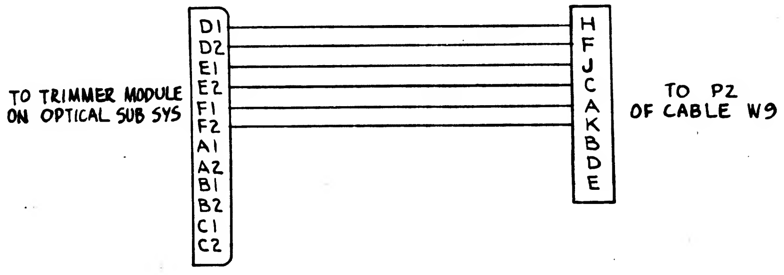
AD-1980

REVISIONS				
SYM	ZONE	DESCRIPTION	DATE	APPROVAL
REV	—	CLASS A RELEASE PER TDRR 21713		

NOTES:
1. INTERPRET DRAWING IN ACCORDANCE WITH MIL-D-70327
2. WIRE PER ND 1002032
3. SOLDER PER ND1002071
4. IDENTIFY USING NASA PT NO, REV LTR, MFRS SYM AND CABLE NO. (W17) PER ND 1002019
5. MIL-I-631, TYPE F, FORM U, GRADE C, CLASS 1, CATEGORY 1, AWG 3/16 (BLACK)

CONDUCTOR					FROM COMPONENT	TO COMPONENT	REFERENCE
NO.	ITEM NO	COLOR	LENGTH ±.500	ROUTE			
1	1	BLK	36"		D1	H	
2	4	ORN			D2	F	
3	3	RED			E1	J	
4	1	BLK			E2	C	
5	3	RED			F1	A	
6	2	BRN	36"		F2	K	





SCHEMATIC DIAGRAM

REFERENCE DRAWINGS:
1. INTERCONNECTION DIAGRAM 1022949

✱ VENDOR ITEM-SEE SOURCE CONTROL OR SPECIFICATION CONTROL DRAWING

ITEM NO.	QTY REQD	SYM	GOVERNMENT/NASA NO.	KOLLSMAN PART NO.	CODE IDENT	NOMENCLATURE OR DESCRIPTION	MATERIAL	SPECIFICATION	UNIT WT
10	AS REQD	✱	1001670-2	60 03503 7002		TAPE, LACING			
9	1	✱	1015865-466	60 02503 5053		INSULATION SLEEVING (2" LG)			
8	1	✱	SEE NOTE 5	60 02505 0001		INSULATION SLEEVING (34" LG)			
7	6	✱	1001732-088	60 02503 5002		INSULATION SLEEVING (3/8" LG)			
6	1	✱	1001907-002			CONNECTOR			
5	1	✱	1001791-1			CONNECTOR			
4	36"		MIL-W-16878/1B 24	60 60105 2404		WIRE, ELECTRICAL (ORN)			
3	72"		MIL-W-16878/1B 24	60 60105 2403		WIRE, ELECTRICAL (RED)			
2	36"		MIL-W-16878/1B 24	60 60105 2402		WIRE, ELECTRICAL (BRN)			
1	72"		MIL-W-16878/1B 24	60 60105 2401		WIRE, ELECTRICAL (BLK)			
	.011	LIST OF PARTS AND MATERIALS							

NEXT ASSY	USED ON
1900030	

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOL ON: FRACTIONS ± — DECIMALS ± — ANGLES ± —
DO NOT SCALE THIS DRAWING
MATERIAL
CONTRACT NAS9-497

KOLLSMAN INSTRUMENT CORPORATION
ELMHURST NEW YORK
KIC PN 02386910428
DRAWN F.C. WILLE/LM DATE 6-7-65
CHECKED [illegible] 6-9-65
APPROVAL [illegible] 6-7-[illegible]
APPROVAL
NASA APPROVAL C.C. [illegible]
MIT APPROVAL [illegible]

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

TITLE
CABLE ASSEMBLY, SPECIAL PURPOSE, ELECTRICAL (W17)

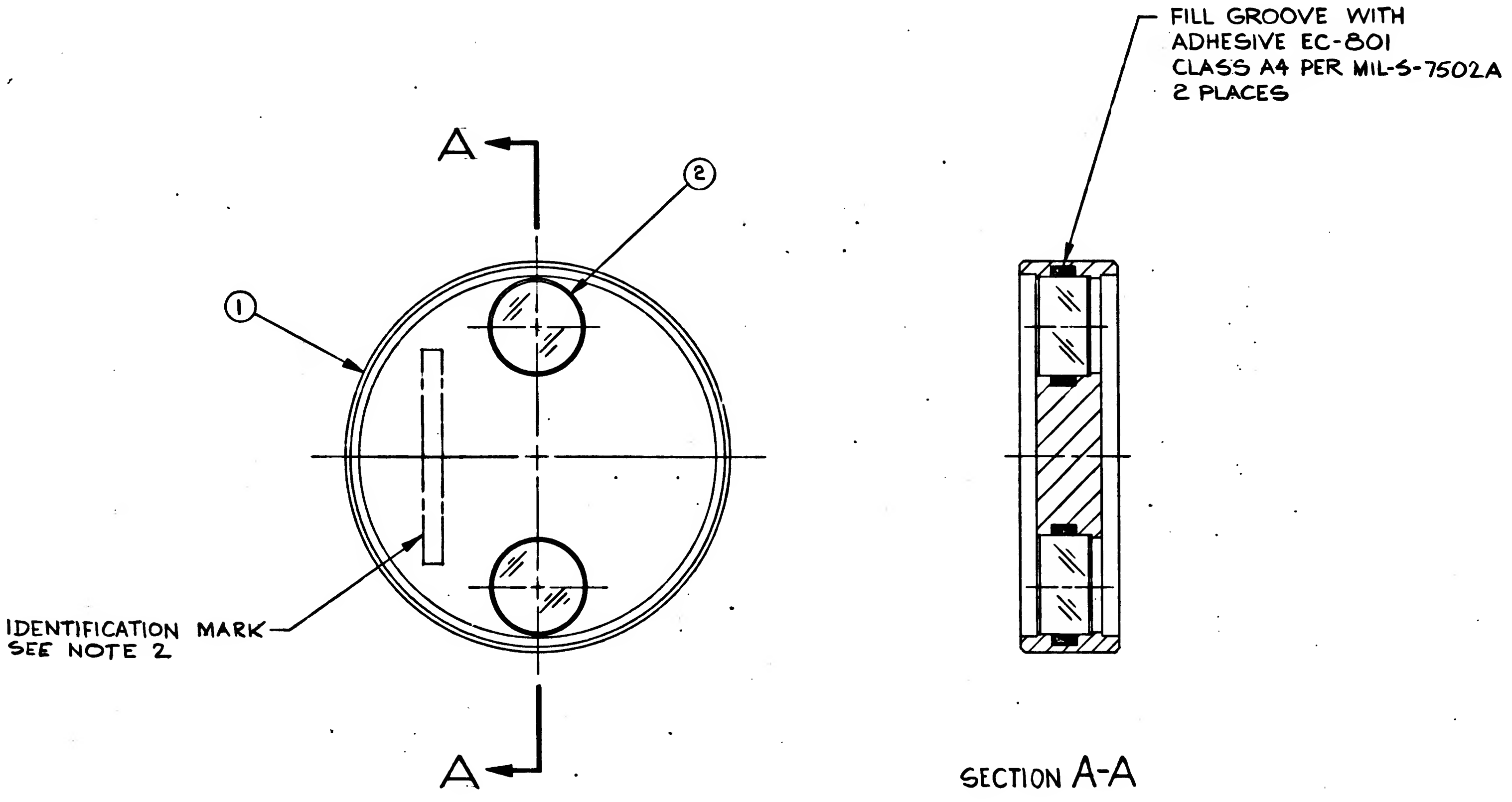
CODE IDENT NO. 89944
SIZE D
NASA NUMBER 1022934
SCALE 1:1
WEIGHT
CALC ACTUAL
SHEET 1 OF 1

MASTER

MASTER

REVISIONS 20171				
SYM	ZONE	DESCRIPTION	DATE	APPROVAL

NOTES:
1. INTERPRET DWG PER MIL-D-70327.
2. IDENTIFY USING NASA DRAWING NO., REVISION LETTER AND MANUFACTURER'S SYMBOL PER ND1002019.



MASTER

2	2		1001905	03386911534		FILTER, LIGHT			
1	1		1022488	03386911321		ADAPTER, FILTER			
ITEM NO.	QTY REQD	SYM	GOVERNMENT/NASA NO.	KOLLSMAN PART NO.	CODE IDENT	NOMENCLATURE OR DESCRIPTION	MATERIAL	SPECIFICATION	UNIT WT
	011	LIST OF PARTS AND MATERIALS							

1022933	1019970
NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOL ON FRACTIONS ± ~ DECIMALS ± ~ ANGLES ± ~
DO NOT SCALE THIS DRAWING
MATERIAL ~
CONTRACT

KOLLSMAN INSTRUMENT CORPORATION
ELMHURST NEW YORK
KIC PN 02386910383
DRAWN K. GRUBLER DATE 6-14-65
CHECKED J. [illegible] 6-14-65
APPROVAL [illegible] 6-17-65
APPROVAL
NASA APPROVAL C. C. [illegible] 6/15/65
[illegible] 6-16-1965
MIT APPROVAL M. G. Hurley 6-15-65

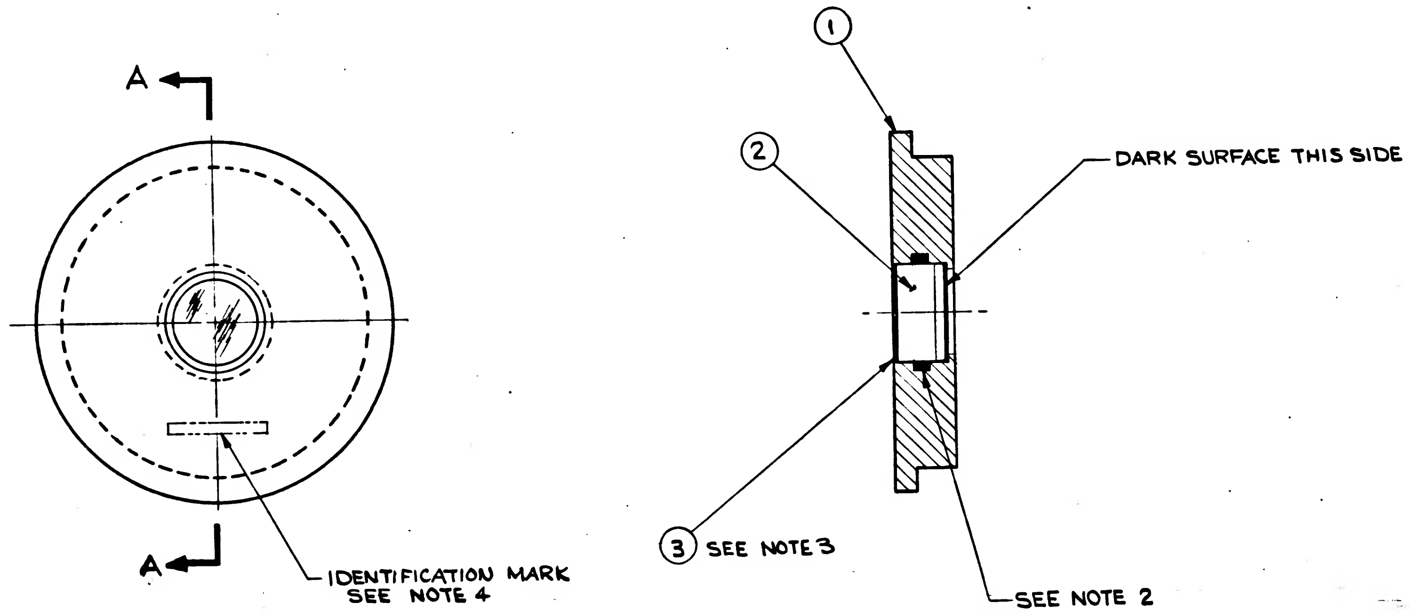
MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

TITLE
ADAPTER, FILTER ASSY
PHOTOMETER

CODE IDENT NO. 89944
SIZE D
NASA NUMBER 1022941
SCALE 2/1
WEIGHT
CALC ACTUAL
SHEET
OF

REVISIONS 2/165 7/22/65				
SYM	ZONE	DESCRIPTION	DATE	APPROVAL

NOTES:
1. INTERPRET DWG PER MIL-D-70327.
2. FILL GROOVE WITH ADHESIVE PER MIL-S-7124
3. CEMENT ITEM 3 TO ITEM 1 WITH EC-826 PER MIL-A-5092 TYPE III
4. IDENTIFY USING NASA DWG NO., REVISION LETTER AND MANUFACTURERS SYMBOL PER ND1002019.



SECTION A-A

ITEM NO.	QTY REQD	SYM	GOVERNMENT/NASA NO.	KOLLSMAN PART NO.	CODE IDENT	NOMENCLATURE OR DESCRIPTION	MATERIAL	SPECIFICATION	UNIT WT
3	1		1022497	03386911584		MASK, LIGHT			
2	1	*	1001905	03386911534		FILTER, LIGHT			
1	1		1022522	03386911770		ADAPTER, FILTER			
	-011		LIST OF PARTS AND MATERIALS						

*- VENDOR ITEM- SEE SOURCE CONTROL OR SPEC. CONTROL DWG.

NEXT ASSY	USED ON
1019896	1019970

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOL ON: FRACTIONS ± ~ DECIMALS ± ~ ANGLES ± ~
DO NOT SCALE THIS DRAWING
MATERIAL ~
CONTRACT NAS 9- 497

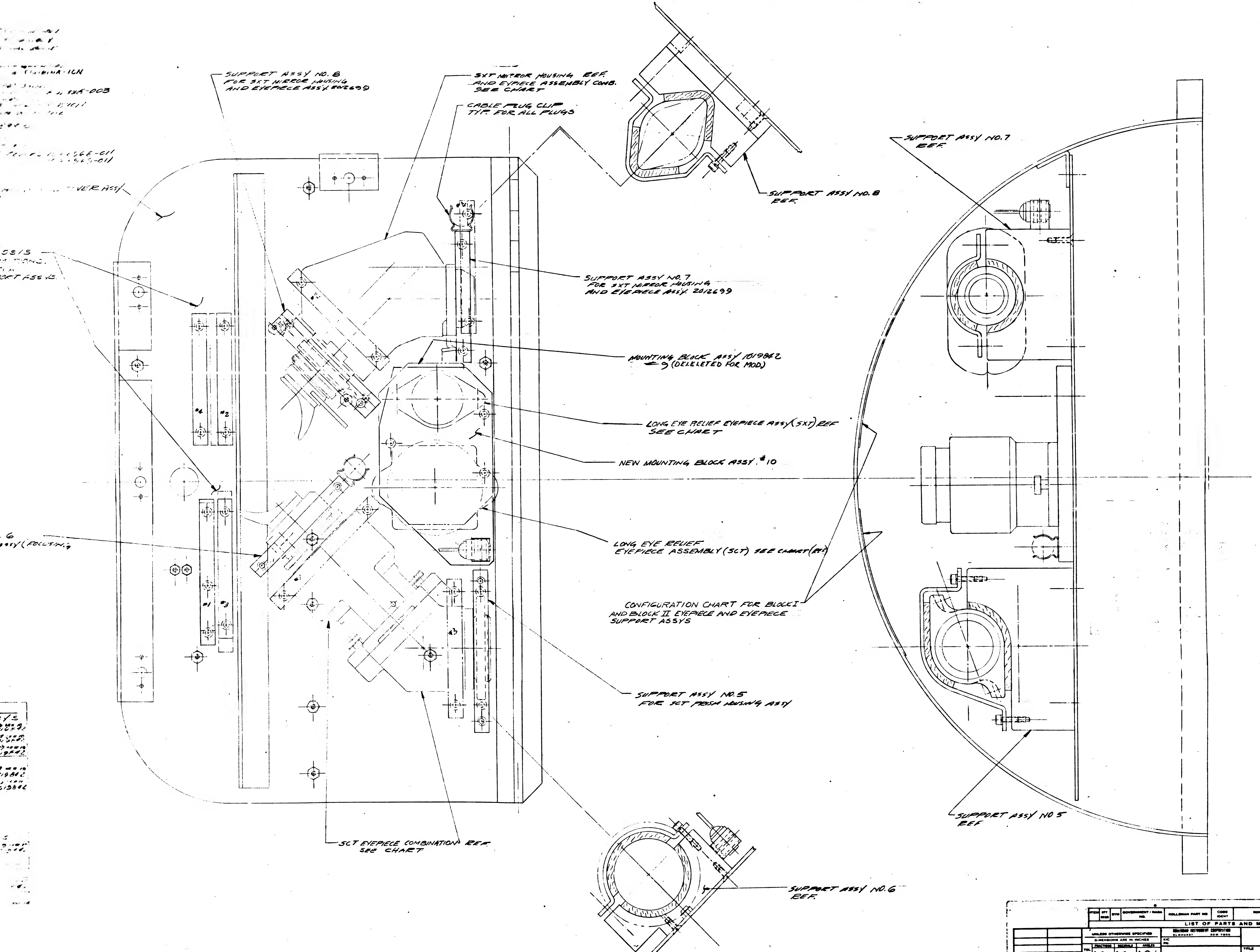
KOLLSMAN INSTRUMENT CORPORATION ELMHURST NEW YORK
KIC PN 02386910502
DRAWN V.P. Deus DATE 7-12-65
CHECKED Frank P. Plesche 7-13-65
APPROVAL Leo Cengos 7-13-65
APPROVAL
NASA APPROVAL A.C. [illegible] 7/21/65
[illegible] 7/21/65
MIT APPROVAL [illegible] 7/16/65

02 38691 0502 MANNED SPACECRAFT CENTER
HOUSTON, TEXAS
TITLE
ADAPTER FILTER ASSY

CODE IDENT NO. 89944
SIZE D
NASA NUMBER 1022957
SCALE 2:1 WEIGHT CALC ACTUAL SHEET 1 OF 1

1022957

AD-1380



MASTER

ITEM	QTY REQD	SYM	GOVERNMENT / NASA NO.	KOLLSMAN PART NO	CODE IDENT	NOMENCLATURE OR DESCRIPTION	MATERIAL	SPECIFICATION	UNIT WT

LIST OF PARTS AND MATERIALS

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOL ON FRACTIONS ± ∼ DECIMALS ± ∼ ANGLES ± ∼
DO NOT SCALE THIS DRAWING
MATERIAL
CONTRACT

KOLLSMAN INSTRUMENT CORPORATION
ELMHURST NEW YORK
KIC PN
DRAWN DATE
CHECKED
APPROVAL D-3-6
APPROVAL
A. C. METZGER
NASA APPROVAL
MIT APPROVAL

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

TITLE
MECHANIZATION DRAWING
SUA/NAA BASE
SHIPPING CONTAINER MOD.

CODE IDENT NO. SIZE R NASA NUMBER 1022960
SCALE 1:1 WEIGHT SHEET 1 OF 2

NEXT ASSY USED ON
APPLICATION

F2

1022960

NOTES

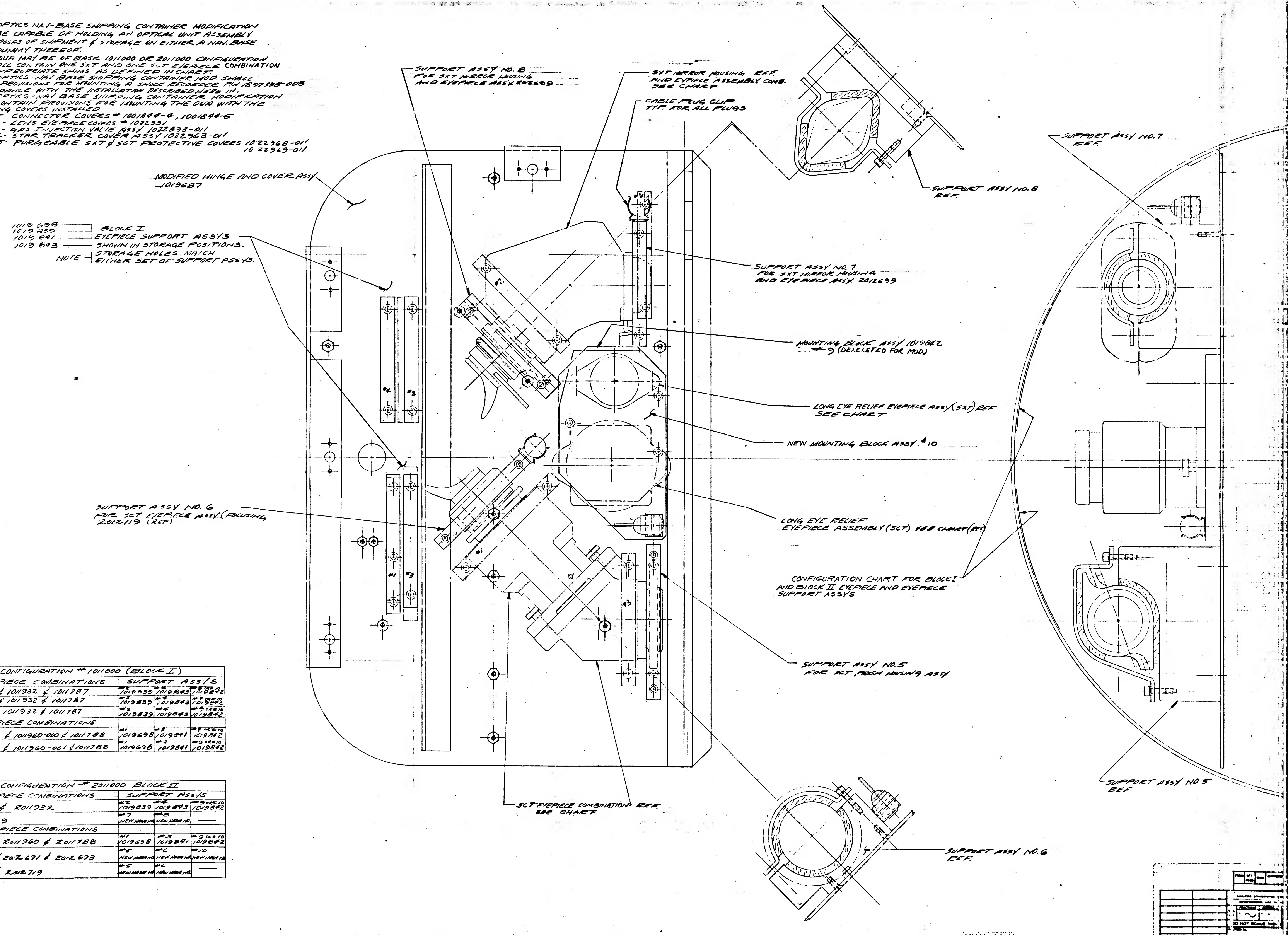
1- THE OPTICS NAV-BASE SHIPPING CONTAINER MODIFICATION SHALL BE CAPABLE OF HOLDING AN OPTICAL UNIT ASSEMBLY FOR PURPOSES OF SHIPMENT & STORAGE ON EITHER A NAV. BASE OR A DUMMY THEREOF.

THE OUA MAY BE OF BASIC 1011000 OR 2011000 CONFIGURATION AND SHALL CONTAIN ONE SXT AND ONE SCT EYEPIECE COMBINATION WITH APPROPRIATE SHIMS AS DEFINED IN CHART.

2- THE OPTICS-NAV BASE SHIPPING CONTAINER MOD. SHALL CONTAIN PROVISIONS FOR MOUNTING A SHOCK RECORDER P/N 1897338-003 IN ACCORDANCE WITH THE INSTALLATION DESCRIBED HERE IN.

3- THE OPTICS-NAV BASE SHIPPING CONTAINER MODIFICATION SHALL CONTAIN PROVISIONS FOR MOUNTING THE OUA WITH THE FOLLOWING COVERS INSTALLED

1- CONNECTOR COVERS # 1001844-4, 1001844-5
2- LENS EYEPIECE COVERS # 1022331
3- GAS INJECTION VALVE ASSY 1022893-011
4- STAR TRACKER COVER ASSY 1022963-011
5- PURGEABLE SXT & SCT PROTECTIVE COVERS 1022968-011
1022969-011



CONFIGURATION # 1011000 (BLOCK I)			
SXT EYEPIECE COMBINATIONS	SUPPORT ASSY/S		
1011786-000 & 1011932 & 1011787	#2 1019839	#4 1019843	#9 OR #10 1019842
1011786-001 & 1011932 & 1011787	#2 1019839	#4 1019843	#9 OR #10 1019842
1013009 & 1011932 & 1011787	#2 1019839	#4 1019843	#9 OR #10 1019842
SCT EYEPIECE COMBINATIONS			
1011734-000 & 1011960-000 & 1011788	#1 1019698	#3 1019841	#9 OR #10 1019842
1011734-001 & 1011960-001 & 1011788	#1 1019698	#3 1019841	#9 OR #10 1019842

CONFIGURATION # 2011000 BLOCK II			
SXT EYEPIECE COMBINATIONS	SUPPORT ASSY/S		
2011786 & 2011932	#2 1019839	#4 1019843	#9 OR #10 1019842
2012699	#7 NEW NASA NO.	#8 NEW NASA NO.	—
SCT EYEPIECE COMBINATIONS			
2011734 & 2011960 & 2011788	#1 1019698	#3 1019841	#9 OR #10 1019842
2012667 & 2012691 & 2012693	#5 NEW NASA NO.	#6 NEW NASA NO.	#10 NEW NASA NO.
2012667 & 2012719	#5 NEW NASA NO.	#6 NEW NASA NO.	—

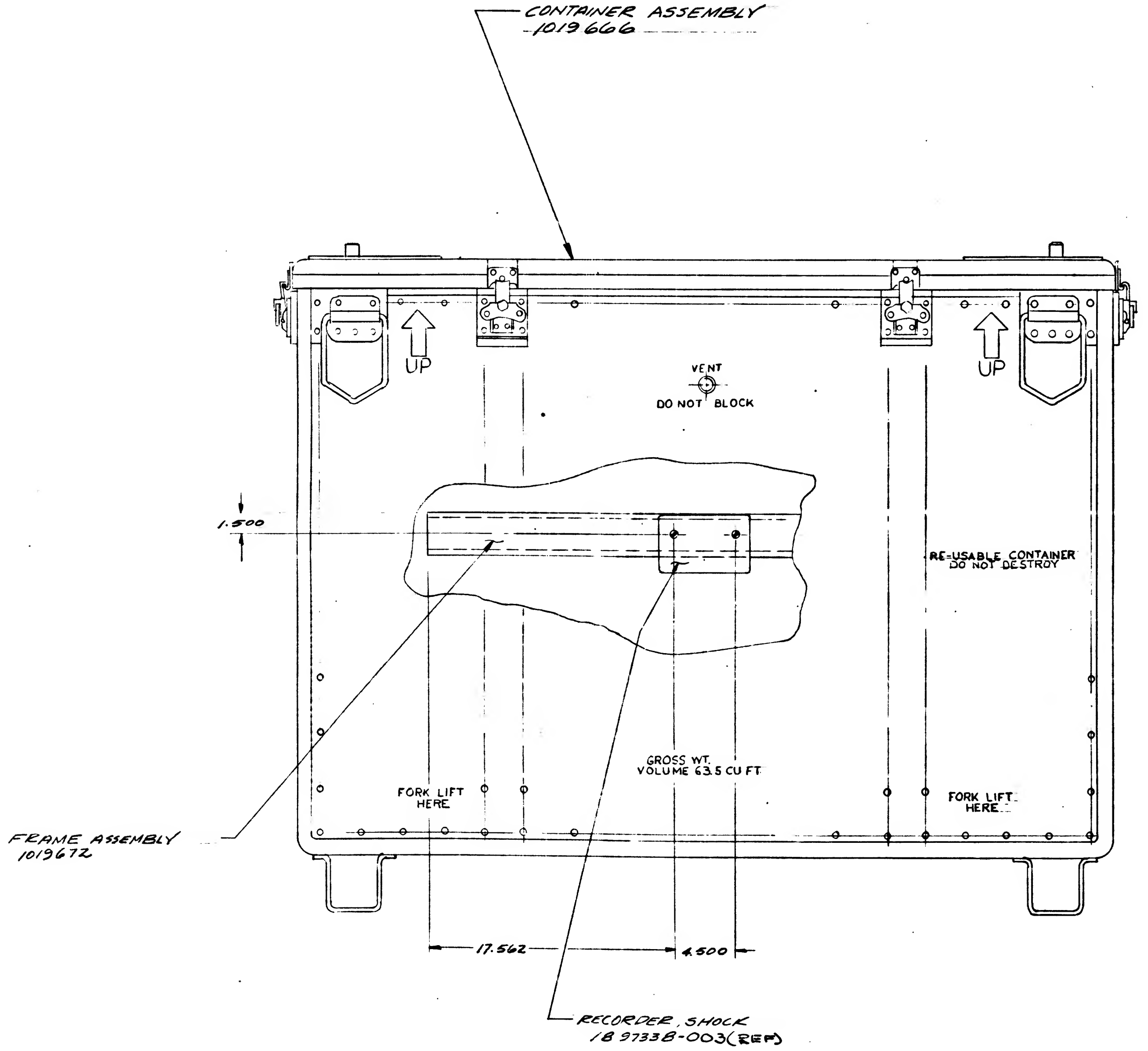
MASTER

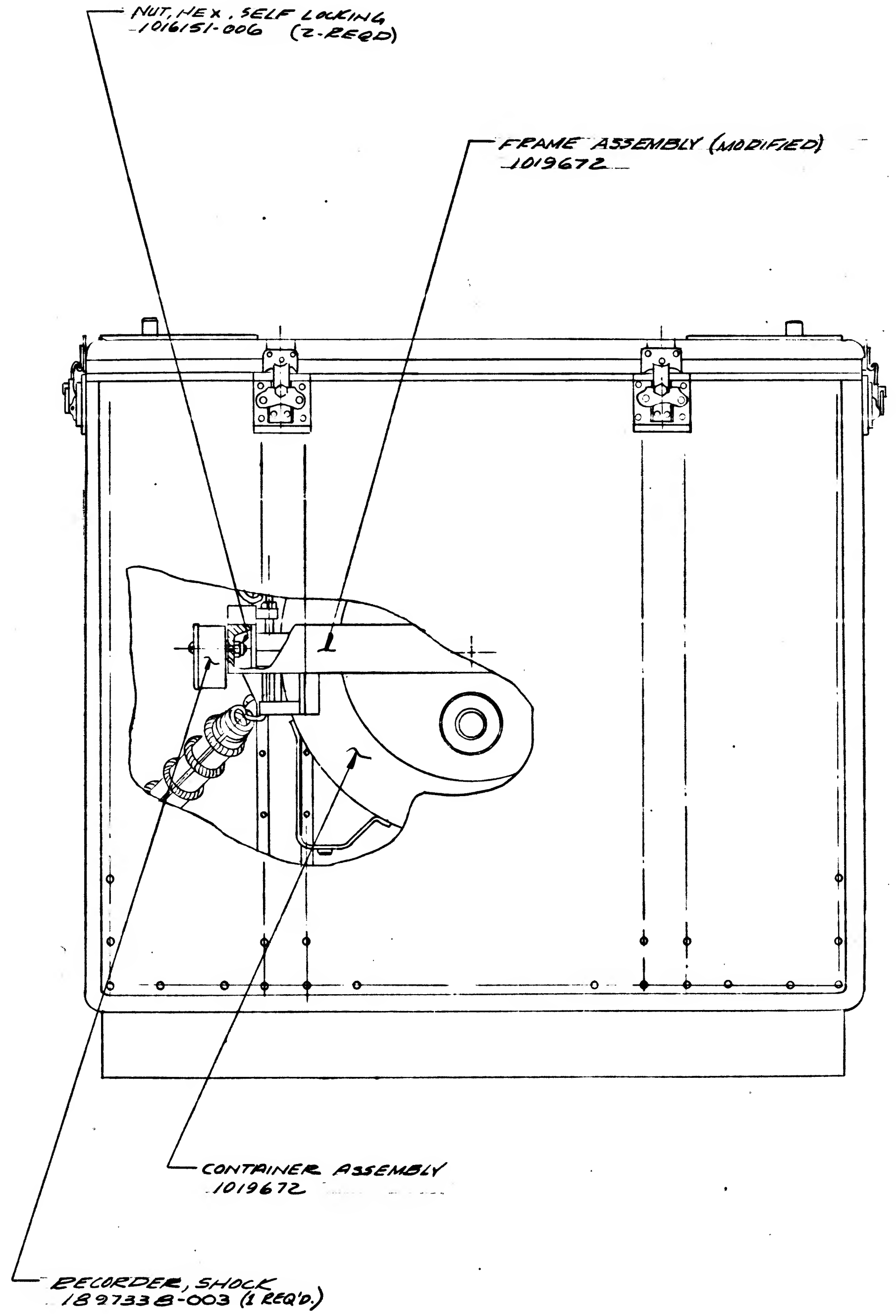
APPLICATION

F-1

1022960

SYM	ZONE	DESCRIPTION	DATE	APPROVAL
REVISIONS				





MASTER

ITEM	QTY REQD	SYM	GOVERNMENT / NASA NO.	KOLLSMAN PART NO.	CODE IDENT	NOMENCLATURE OR DESCRIPTION	MATERIAL	SPECIFICATION	UNIT WT

LIST OF PARTS AND MATERIALS

NEXT ASSY	USED ON
1800 30	

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOL ON: FRACTIONS ± ~ DECIMALS ± .030 ANGLES ± ~
DO NOT SCALE THIS DRAWING
MATERIAL —
CONTRACT NAS9-497

KOLLSMAN INSTRUMENT CORPORATION
ELMHURST NEW YORK
KIC
PN
DRAWN B. Kozlowski DATE 1-6-65
CHECKED
APPROVAL 1-26-65
APPROVAL
A. C. METZGER
NASA APPROVAL
MIT APPROVAL

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

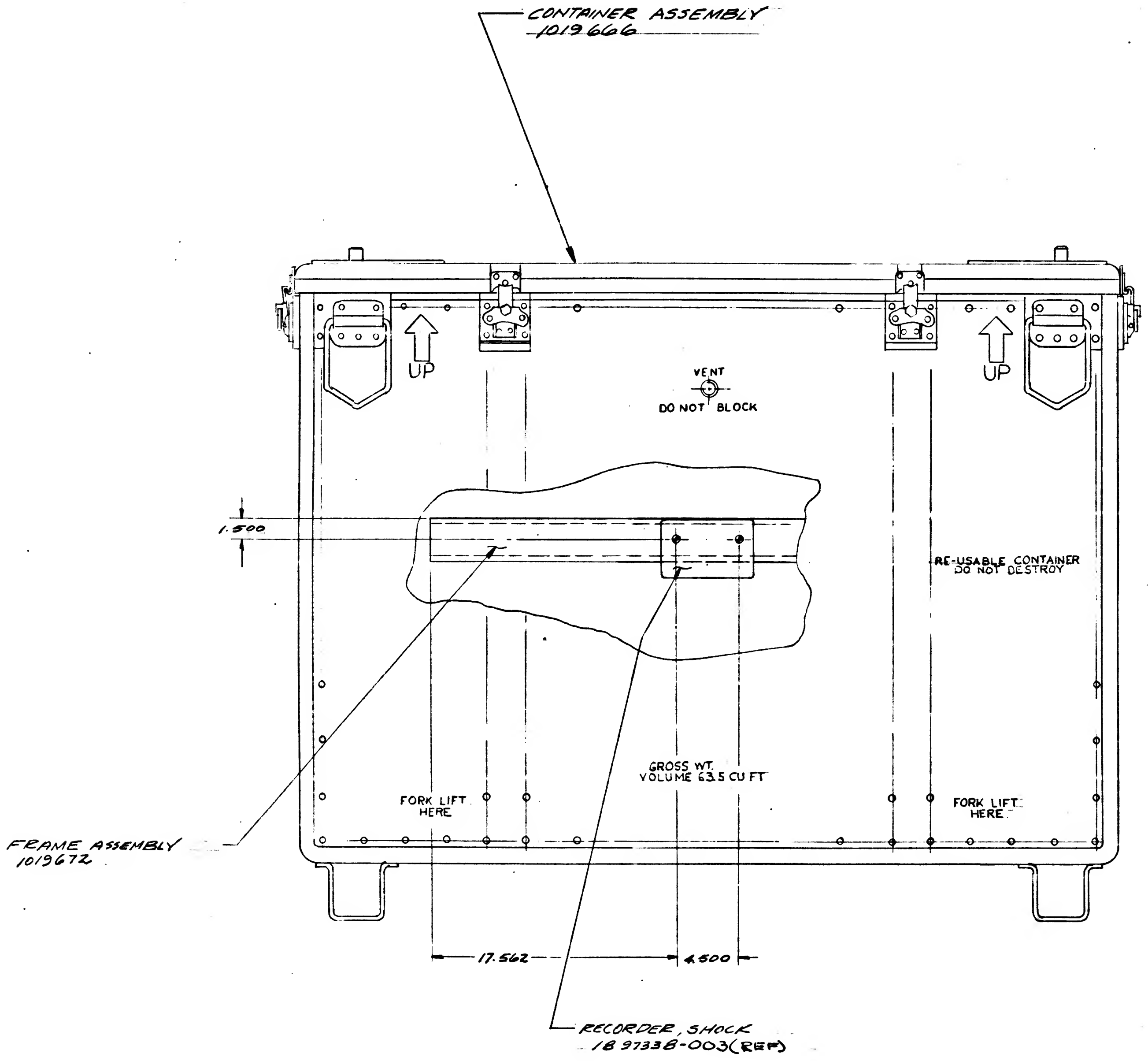
TITLE
MECHANIZATION DRAWING
GUA/NAV BASE
SHIPPING CONTAINER MOD.

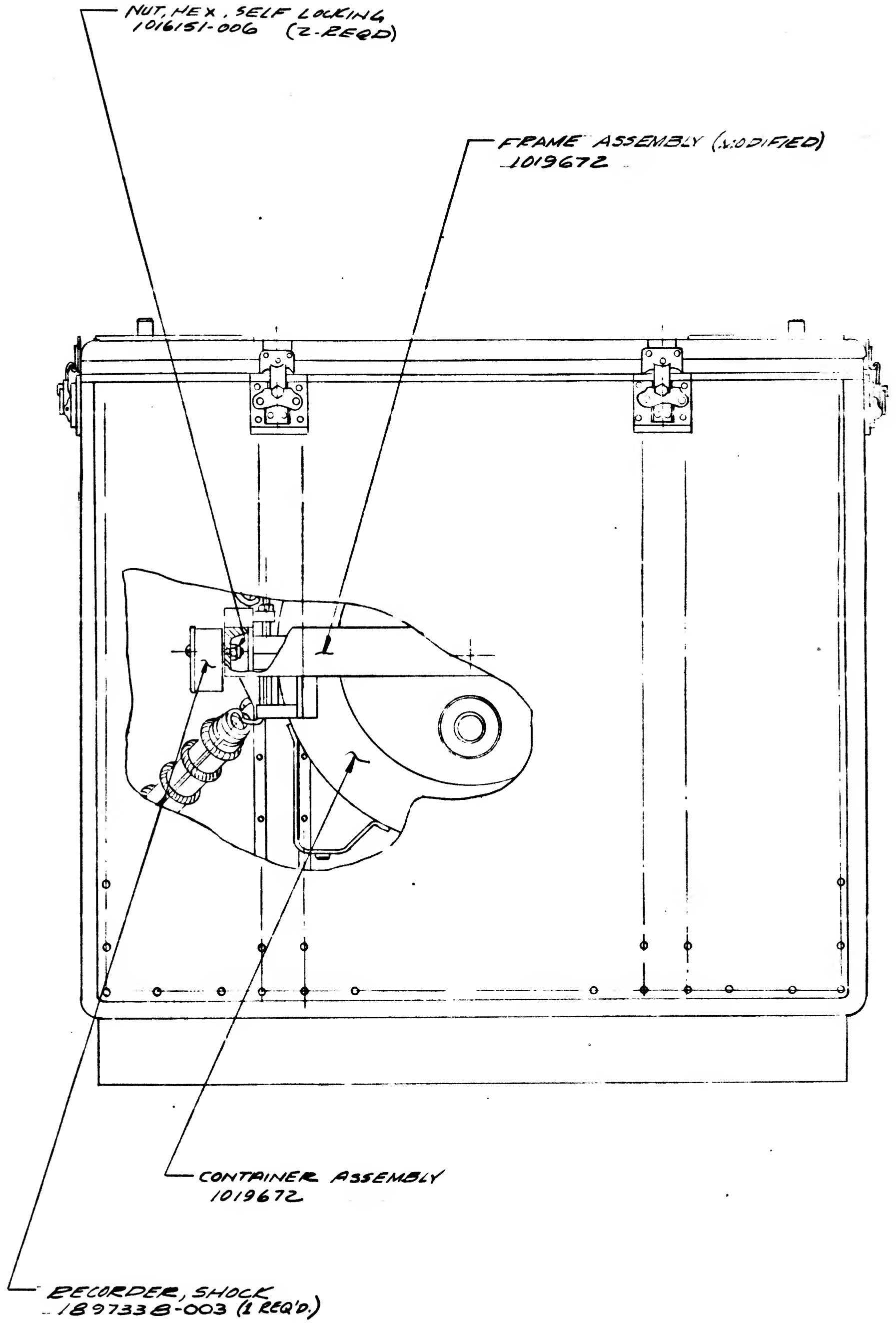
CODE IDENT NO. 89944
SIZE R
NASA NUMBER 1022960
SCALE 1:4
WEIGHT CALC ACTUAL
SHEET 2 OF 2

F-2

2 OF 2

1022960





MASTER

ITEM	QTY REQD	SYM	GOVERNMENT / NASA NO.	KOLLSMAN PART NO.	CODE IDENT

LIST OF PARTS

KOLLSMAN INSTRUMENT CORPORATION
ELMHURST NEW YORK

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES

TOL ON	FRACTIONS	DECIMALS	ANGLES
	± ~	± .030	± ~

DO NOT SCALE THIS DRAWING

MATERIAL
—

KIC
PN

DRAWN B. Kozlowski DATE 12-6
CHECKED
APPROVAL W. Amyx 12-6
APPROVAL

A. C. [illegible]

NASA APPROVAL

MIT APPROVAL

NEXT ASSY	USED ON
Box 30	

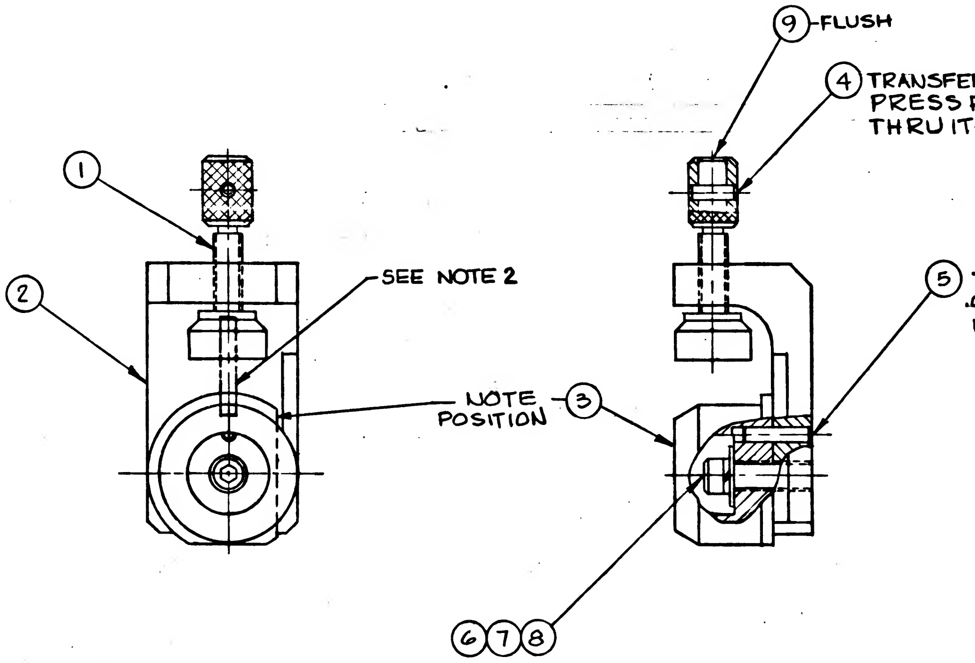
APPLICATION

CONTRACT
NAS 9-497

F-1 1 OF 2 1022960

SYM	ZONE	DESCRIPTION	DATE	APPROVAL
REVISIONS				
—	—	INITIAL RELEASE [illegible] A PER TDRR		

NOTES:
1- INTERPRET DWG PER MIL-D-70327.
2- IDENTIFY USING NASA DRAWING NO., REVISION LETTER AND MANUFACTURER'S SYMBOL PER ND 1002019, BAGGED OR TAGGED.



④ TRANSFER DRILL AND REAM $.0615^{+.0005}_{-.0000}$ DIA THRU
PRESS FIT ITEM 4
THRU ITEM 1 AND 9

⑤ TRANSFER DRILL AND REAM
$.0927^{+.0005}_{-.0000}$ DIA x .531 DEEP PRESS FIT
ITEM 5 THRU ITEMS 2 AND 3

* VENDOR ITEM SEE SOURCE CONTROL
OR SPECIFICATION CONTROL DRAWING.

	ITEM NO.	QTY REQD	SYM	GOVERNMENT/NASA NO.	KOLLSMAN PART NO.	CODE IDENT	NOMENCLATURE OR DESCRIPTION	MATERIAL	SPECIFICATION	UNIT WT
✓	9	1		1022536	03386911803		KNOB			
✓	8	1		MS35337-79	74439050003		WASHER, LOCK, SPLIT			
✓	7	1		AN960-C6	74468051003		WASHER, FLAT, REGULAR			
✓	6	1		MS16995-18			SCREW, CAP, SOCKET HEAD			
✓	5	1	*	1017415-44	73002105068		PIN, DOWEL			
✓	4	1	*	1017415-27	73002105046		PIN, DOWEL			
	3	1		1022532	03386911804		PLUG			
✓	2	1		1022537	03386911809		BRACKET			
	1	1		1022962-01	02386910507		CLAMPING SCREW ASSY			
		011	LIST OF PARTS AND MATERIALS							

NEXT ASSY	USED ON
1900030	

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOL ON FRACTIONS ± — DECIMALS ± — ANGLES ± —
DO NOT SCALE THIS DRAWING
MATERIAL —
CONTRACT NAS9-497

KOLLSMAN INSTRUMENT CORPORATION
ELMHURST NEW YORK
KIC PN 01386910063
DRAWN T. LOMNITZ DATE 8-4-65
CHECKED N. Ketzler 8-4-65
APPROVAL
APPROVAL
~~NASA APPROVAL~~ NOT REQUIRED PER LETTER NASA PP7-65-612
MIT APPROVAL

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

TITLE
PRE-EXPOSURE
PLUG ASSY

CODE IDENT NO. 89944
SIZE D
NASA NUMBER 1022963
SCALE 2/1
WEIGHT CALC ACTUAL
SHEET 1 OF 1

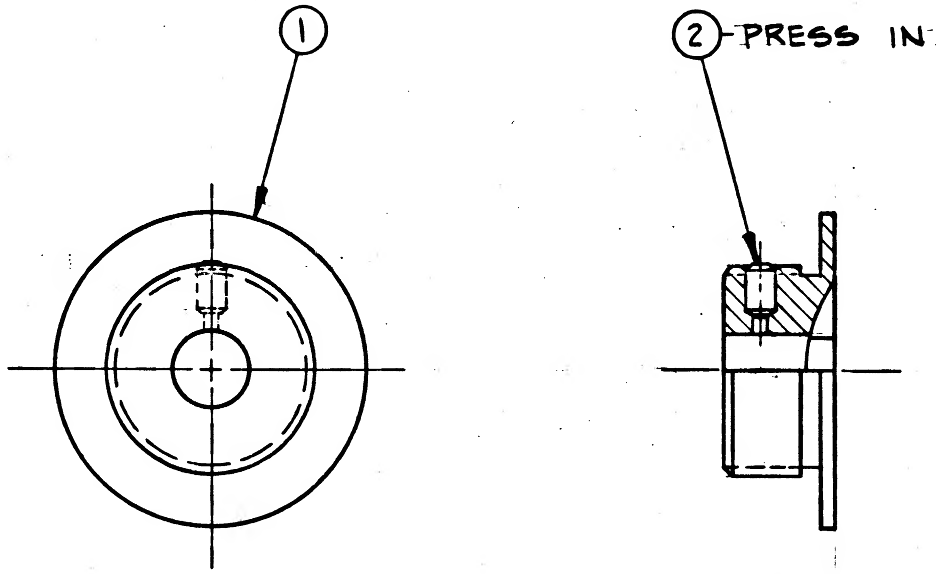
MASTER

AD-1980

NOTES:

1. INTERPRET DWG PER MIL-D-70327.
2. IDENTIFY USING NASA DWG NO., REVISION LETTER AND MANUFACTURER'S SYMBOL PER ND1002019 (BAGGED OR TAGGED).

REVISIONS				23061
SYM	ZONE	DESCRIPTION	DATE	APPROVAL
—	—	INITIAL RELEASE CLASSA PER TDRR		



ITEM NO.	QTY REQD	SYM	GOVERNMENT/NASA NO.	KOLLSMAN PART NO.	CODE IDENT	NOMENCLATURE OR DESCRIPTION	MATERIAL	SPECIFICATION	UNIT WT
2	1		1022545	03386911814		INSERT			
1	1		1022544	03386911813		NUT			
	-011	LIST OF PARTS AND MATERIALS							

NEXT ASSY	USED ON
1022968	1022970
1022969	1022970
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOL ON: FRACTIONS ± ~ DECIMALS ± ~ ANGLES ± ~
DO NOT SCALE THIS DRAWING
MATERIAL ~
CONTRACT NAS9-497

KOLLSMAN INSTRUMENT CORPORATION
ELMHURST NEW YORK
KIC PN 02386910511
DRAWN AJ PERALTA DATE 7-29-65
CHECKED F-5-65
APPROVAL
APPROVAL
NOT REQUIRED PER LETTER NASA PP7-65-612 9/3/65
MIT APPROVAL 6Oct65

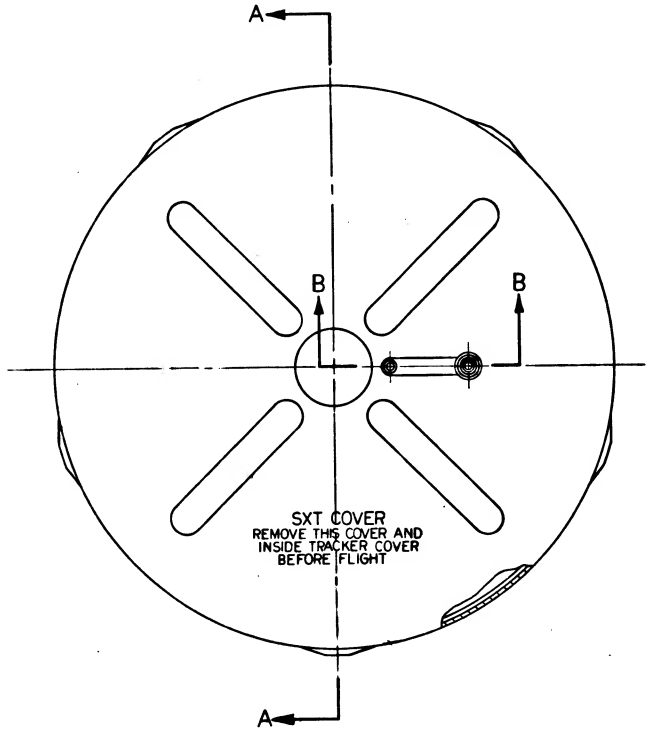
MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS
TITLE NUT AND INSERT ASSY
CODE IDENT NO. 89944
SIZE C
NASA NUMBER 1022965
SCALE 4/1
WEIGHT CALC ACTUAL
SHEET 1 OF 1

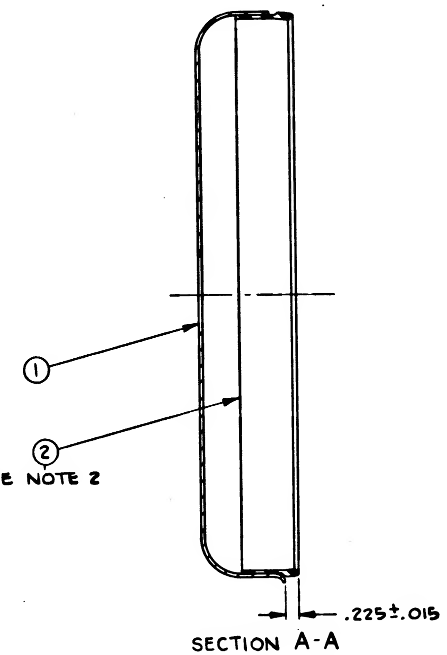
MASTER

AD-1340

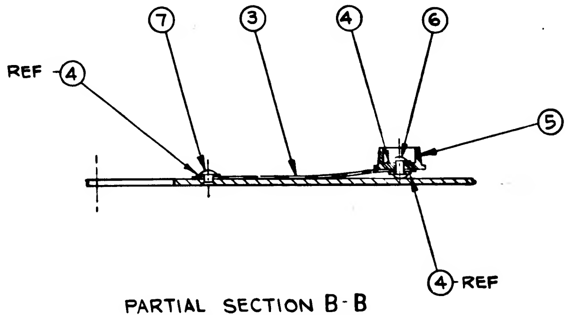
REVISIONS 23061				
SYM	ZONE	DESCRIPTION	DATE	APPROVAL
—	—	INITIAL RELEASE CLASS A PER TDRR		

NOTES:
1. INTERPRET DRAWING PER MIL-D-70327.
2. CEMENT ITEM 2 TO ITEM 1 PER MIL-A-25457.
3. IDENTIFY USING NASA DWG NO., REVISION LETTER AND MANUFACTURER'S SYMBOL PER ND 1002019 (BAGGED OR TAGGED)





SECTION A-A



PARTIAL SECTION B-B
SCALE 2:1

ITEM NO.	QTY REQD	SYM	GOVERNMENT/NASA NO.	KOLLSMAN PART NO.	CODE IDENT	NOMENCLATURE OR DESCRIPTION	MATERIAL	SPECIFICATION	UNIT WT
7	1		MS20426A2-3	74037000002		RIVET, SOLID 100° CSK HEAD			
6	1		MS20470B2-3	74370000001		RIVET, SOLID UNIVERSAL HEAD			
5	1		1022430	03386911391		PLUG, CAP			
4	3		MS15795-801			WASHER, FLAT			
3	1		1022431-002	03386911392		STRAP			
2	1		1022551	03386911825		SEAL, RING			
1	1		1022553	03386911827		COVER, OUTSIDE			
	-011	LIST OF PARTS AND MATERIALS							

1022968	1022970
NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOL ON: FRACTIONS ± ~ DECIMALS ± ~ ANGLES ± ~
DO NOT SCALE THIS DRAWING
MATERIAL ~
CONTRACT NAS9-497

KOLLSMAN INSTRUMENT CORPORATION ELMHURST NEW YORK
KIC PN 02386910509
DRAWN AJ PERALTA DATE 8-2-65
CHECKED
APPROVAL
APPROVAL
NOT REQUIRED PER LETTER
NASA APPROVAL
MIT APPROVAL

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS
TITLE SXT COVER ASSEMBLY

CODE IDENT NO.	SIZE	NASA NUMBER
89944	E	1022967

SCALE 1/1 WEIGHT CALC ACTUAL SHEET 1 OF 1

MASTER

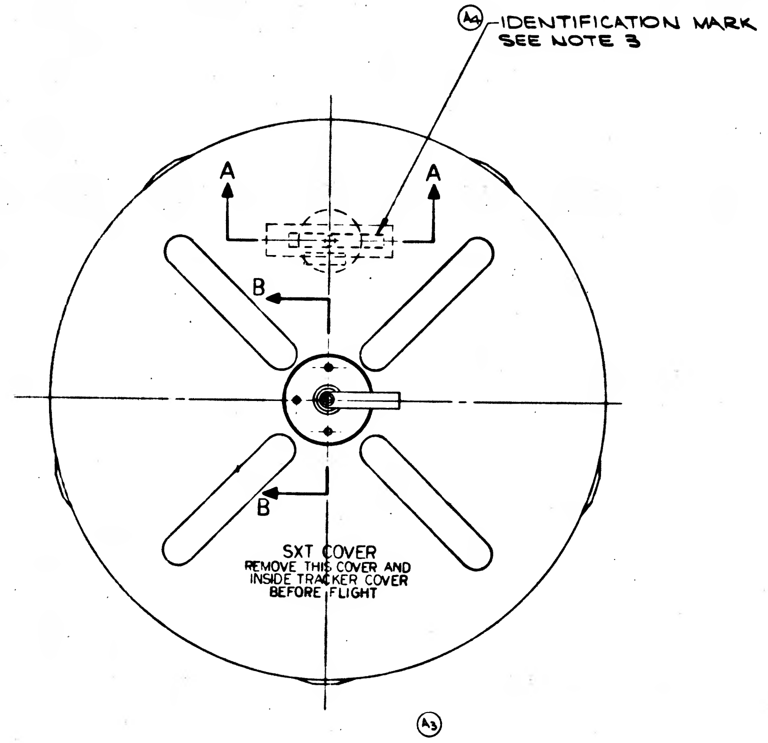
NOTES:

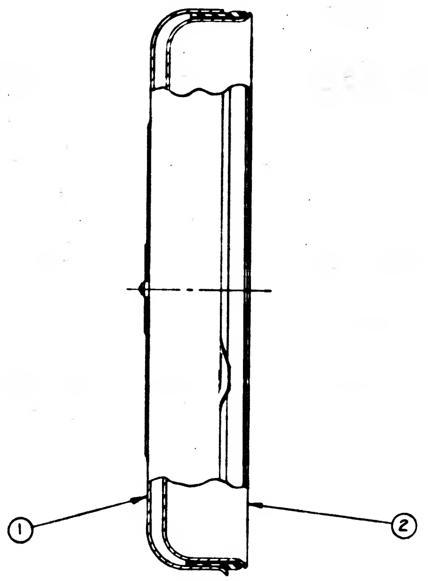
1. INTERPRET DRAWING PER MIL-D-70327.
2. APPLY SEALANT MIL-S-22473 GRADE A PER ND 1002211 TO THREADS OF ITEM 14.
3. (A1) IDENTIFY USING NASA DWG NO., REVISION LETTER AND MANUFACTURERS SYMBOL PER ND 1002019. CHARACTERS SHALL BE BLACK AND .125 HIGH
4. SEAL WITH MIL-S-7124 OR MIL-S-11031.

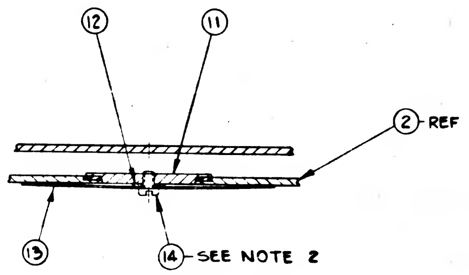
(A2)

REVISIONS

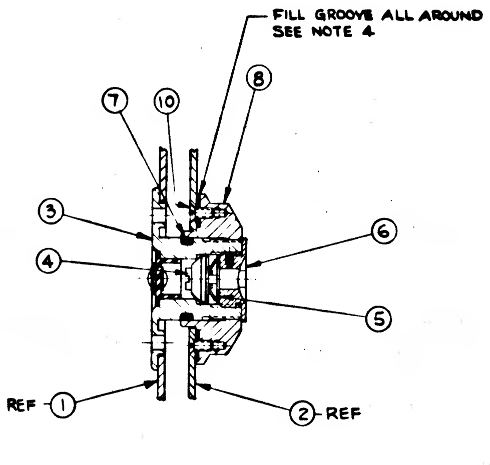
SYM	ZONE	DESCRIPTION	DATE	APPROVAL
—	—	INITIAL RELEASE CLASS A PER TDRR		
A4		REVISED PER ECO 115785 TDRR 25737 DATE 1/28/66	2/8/66 BJR	


(A3) IDENTIFICATION MARK SEE NOTE 3
A
A
B
B
SXT COVER
REMOVE THIS COVER AND INSIDE TRACKER COVER BEFORE FLIGHT
(A3)





PARTIAL SECTION A-A
SCALE 2:1



PARTIAL SECTION B-B
SCALE 2:1

ITEM NO	QTY REQD	SYM	GOVERNMENT/NASA NO.	KOLLSMAN PART NO	CODE IDENT	NOMENCLATURE OR DESCRIPTION	MATERIAL	SPECIFICATION	UNIT WT
14	1		MS35234-1	7445505 5001		SCREW, PAN HD			
13	1		1022547	03386911816		SPRING			
12	1		1022548	03386911817		WASHER			
11	1		1022966-011	02386910510		CAP AND GASKET ASSY			
10	6		MS35249-9	74455052009		SCREW, FLAT HD			
9									
8	1		1022542	03386911811		RETAINER, PLUNGER HOUSING			
7	1		MS9068-014	7445342 1014		PACKING, PREFORMED "O" RING			
6	1		1022965-011	02386910511		NUT AND INSERT ASSY			
5	1		1022546	03386911815		WASHER			
4	1		1022894-011	02386910372		PLUNGER ASSY			
3	1		1022541	03386911810		HOUSING, PLUNGER			
2	1		1022552	03386911824		COVER, INSIDE			
1	1		1022967-011	02386911509		COVER ASSEMBLY			
	-011								

LIST OF PARTS AND MATERIALS

NEXT ASSY	USED ON
1022970	1022970

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOL ON FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING
MATERIAL ~
CONTRACT NAS 9-497

KOLLSMAN INSTRUMENT CORPORATION
ELMHURST NEW YORK
KIC PN 02386910508
DRAWN AJ PERALTA DATE 8-3-65
CHECKED
APPROVAL
APPROVAL
NASA APPROVAL
MIT APPROVAL

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

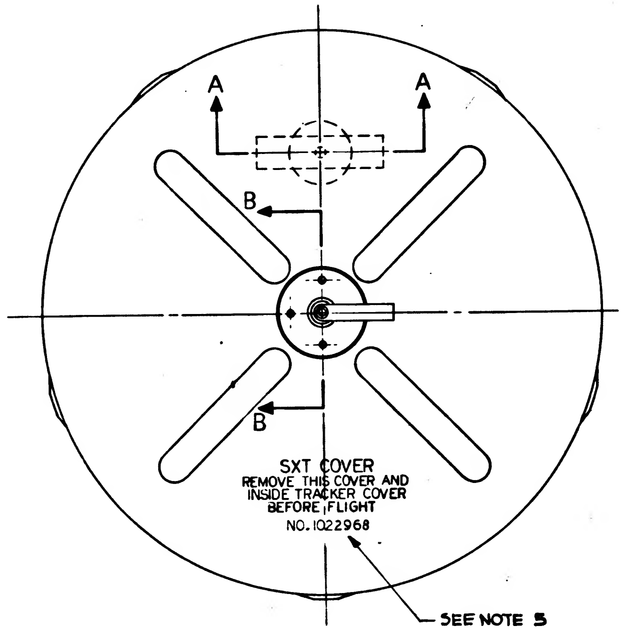
TITLE
SEXTANT COVER

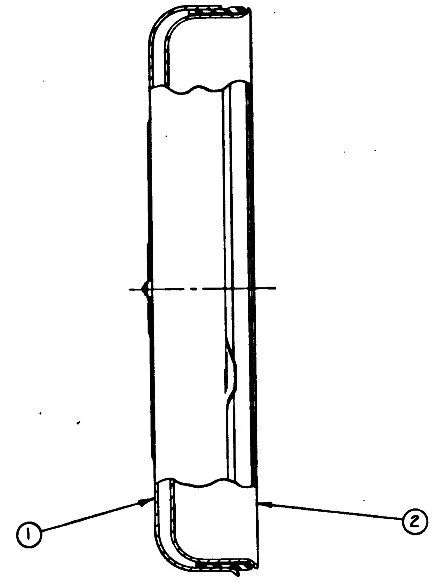
CODE IDENT NO 89944
SIZE E
NASA NUMBER 102296
SCALE 1/1
WEIGHT
CALC ACTUAL
SHEET

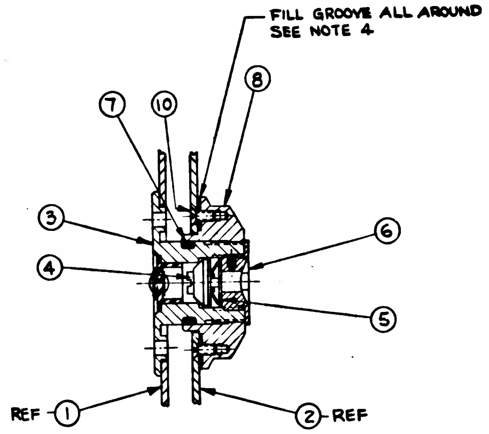
REVISIONS 23061				
SYM	ZONE	DESCRIPTION	DATE	APPROV
② —	—	INITIAL RELEASE CLASS A PER TDRR		

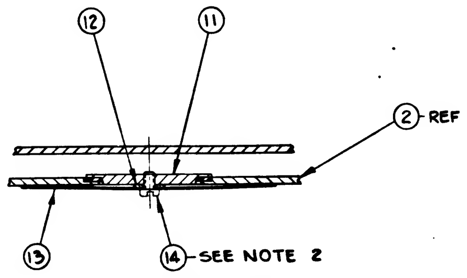
NOTES:

1. INTERPRET DRAWING PER MIL-D-70327.
2. APPLY SEALANT MIL-S-22473 GRADE A PER ND1002211 TO THREADS OF ITEM 14.
3. IDENTIFY USING NASA DWG NO. REV LETTER & MFR'S SYMBOL PER ND1002019 (TAGGED OR BAGGED)
4. SEAL WITH MIL-S-7124 OR MIL-S-11031.
5. STENCIL NASA P/N AS SHOWN & COVER WITH ONE COAT OF LAQUER PER ND1002019. CHARACTERS SHALL BE BLACK & .125 HIGH.









PARTIAL SECTION A-A
SCALE 2:1

PARTIAL SECTION B-B
SCALE 2:1

MASTER

ITEM NO.	QTY REQD	SYM	GOVERNMENT/NASA NO.	KOLLSMAN PART NO.	CODE IDENT	NOMENCLATURE OR DESCRIPTION	MATERIAL	SPECIFICATION	UNIT WT
14	1		MS35234-1	7445505 5001		SCREW, PAN HD			
13	1		1022547	03386911816		SPRING			
✓ 12	1		1022548	03386911817		WASHER			
11	1		1022966-011	02386910510		CAP AND GASKET ASSY			
10	6		MS35249-9	74455052009		SCREW, FLAT HD			
9									
✓ 8	1		1022542	03386911811		RETAINER, PLUNGER HOUSING			
7	1		MS9068-014	74453421014		PACKING, PREFORMED "O" RING			
6	1		1022965-011	02386910511		NUT AND INSERT ASSY			
✓ 5	1		1022546	03386911815		WASHER			
4	1		1022894-011	02386910372		PLUNGER ASSY			
✓ 3	1		1022541	03386911810		HOUSING, PLUNGER			
✓ 2	1		1022552	03386911824		COVER, INSIDE			
✓ 1	1		1022967-011	02386911509		COVER ASSEMBLY			
	-011		LIST OF PARTS AND MATERIALS						

1022970	1022970
NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOL ON FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING
MATERIAL ~
CONTRACT NAS9-497

KOLLSMAN INSTRUMENT CORPORATION
ELMHURST NEW YORK
KIC PN 02386910508
DRAWN AJ PERALTA DATE 8-3-65
CHECKED
APPROVAL
APPROVAL
NOT REQUIRED PER LETTER
NASA APPROVAL 12
MIT APPROVAL

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

TITLE
SEXTANT COVER

CODE IDENT NO. 89944
SIZE E
NASA NUMBER 1022968
SCALE 1/1
WEIGHT CALC ACTUAL
SHEET 1 OF

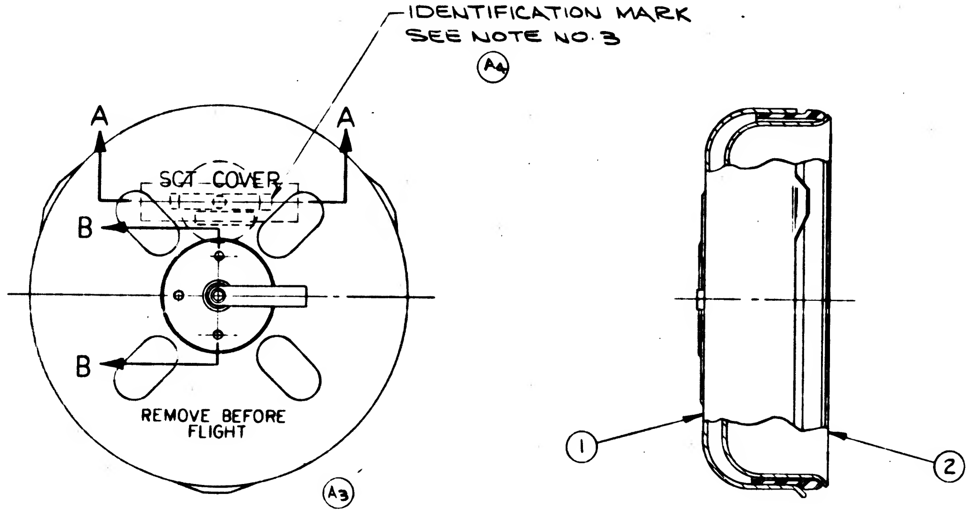
NOTES:

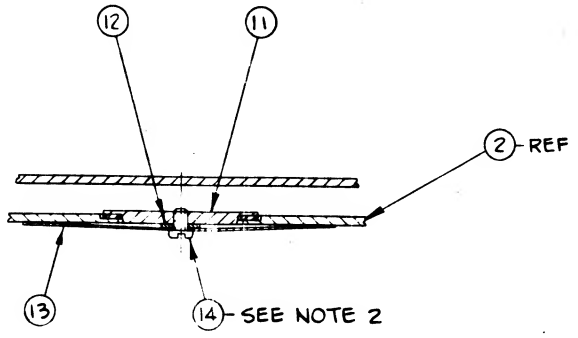
1. INTERPRET DWG PER MIL-D-70327.
2. APPLY SEALANT MIL-S-22473 GRADE A PER ND 1002211 TO THREADS OF ITEM 14.
3. IDENTIFY USING NASA DWG NO., REVISION LETTER AND MANUFACTURERS SYMBOL (A1) PER ND 1002019. CHARACTERS SHALL BE BLACK AND .125 HIGH
4. SEAL WITH MIL-S-7124 OR MIL-S-11031.

(A2)

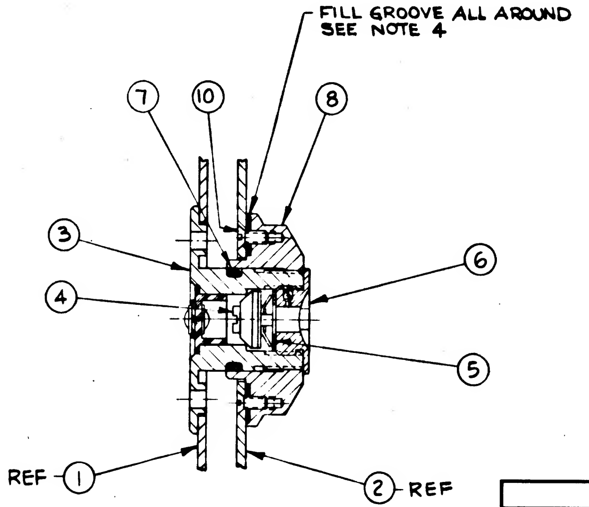
REVISIONS

SYM	ZONE	DESCRIPTION	DATE	APPROVAL
—	—	INITIAL RELEASE CLASS A PER TDRR		
A		REVISED PER ECO NO 5786 PER TDRR 25600 DATE 1/24/66	2/9/66 3/2	[illegible]





PARTIAL SECTION A-A
SCALE 2:1



PARTIAL SECTION B-B
SCALE 2:1

ITEM NO.	QTY REQD	SYM	GOVERNMENT/NASA NO.	KOLLSMAN PART NO.	CODE IDENT	NOMENCLATURE OR DESCRIPTION	MATERIAL	SPECIFICATION	UNIT WT
14	1		MS35234-1	74455055001		SCREW, PAN HD			
13	1		1022547	03386911816		SPRING			
12	1		1022548	03386911817		WASHER			
11	1		1022966-011	02386910510		CAP AND GASKET ASSY			
10	6		MS35249-9	74455052009		SCREW, FLAT HD			
9									
8	1		1022542	03386911811		RETAINER, PLUNGER HOUSING			
7	1		MS9068-014	74453421014		PACKING, PREFORMED "O" RING			
6	1		1022965-011	02386910511		NUT AND INSERT ASSY			
5	1		1022546	03386911815		WASHER			
4	1		1022894-011	02386910372		PLUNGER ASSY			
3	1		1022541	03386911810		HOUSING, PLUNGER			
2	1		1022556	03386911822		COVER, INSIDE			
1	1		1022971-011	02386910513		COVER ASSEMBLY			
	-011	LIST OF PARTS AND MATERIALS							

NEXT ASSY	USED ON
1022970	1022970

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOL ON: FRACTIONS ± — DECIMALS ± — ANGLES ± —
DO NOT SCALE THIS DRAWING
MATERIAL —
CONTRACT NAS 9-497

KOLLSMAN INSTRUMENT CORPORATION
ELMHURST NEW YORK
KIC PN 02386910512
DRAWN AJ PERALTA DATE 8-4-65
CHECKED [illegible] 8-5-65
APPROVAL [illegible]
APPROVAL
NASA APPROVAL [illegible]
MIT APPROVAL [illegible]

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

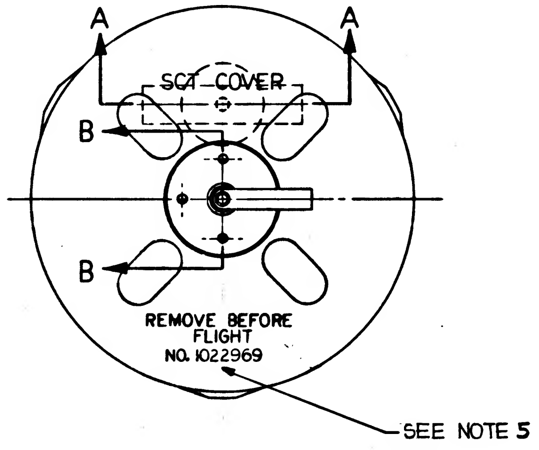
TITLE
TELESCOPE COVER

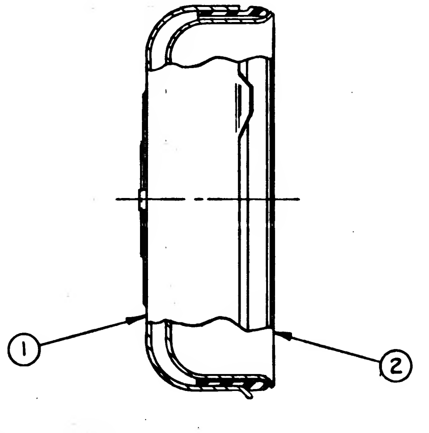
CODE IDENT NO. 89944
SIZE D
NASA NUMBER 1022969
SCALE 1/1
WEIGHT CALC ACTUAL
SHEET 1 OF

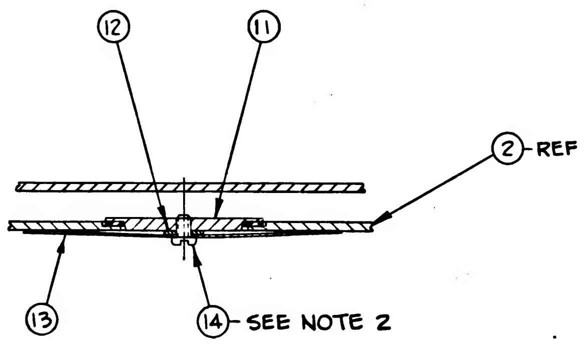
REVISIONS 23061				
SYM	ZONE	DESCRIPTION	DATE	APPROVAL
—	—	INITIAL RELEASE CLASS A PER TDRR		

NOTES:

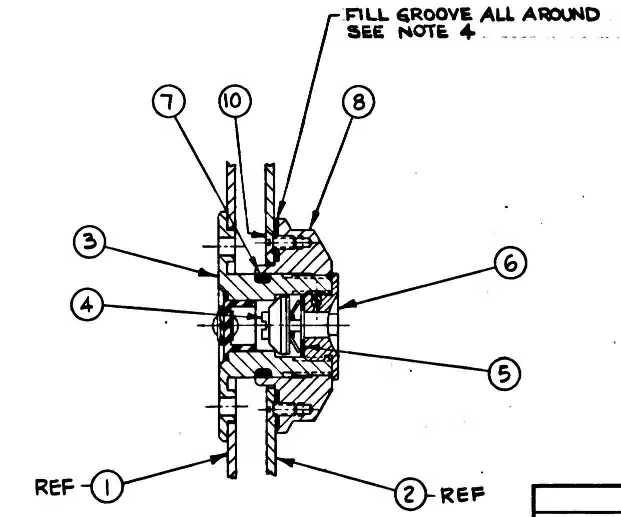
1. INTERPRET DWG PER MIL-D-70327.
2. APPLY SEALANT MIL-S-22473 GRADE A PER ND 1002211 TO THREADS OF ITEM 14.
3. IDENTIFY USING NASA DWG NO., REV LETTER & MFR'S SYMBOL PER ND1002019 (BAGGED OR TAGGED)
4. SEAL WITH MIL-S-7124 OR MIL-S-11031.
5. STENCIL NASA P/N AS SHOWN & COVER WITH ONE COAT OF LAQUER PER ND1002019. CHARACTERS SHALL BE BLACK & .125 HIGH.







PARTIAL SECTION A-A
SCALE 2:1



PARTIAL SECTION B-B
SCALE 2:1

ITEM NO.	QTY REQD	SYM	GOVERNMENT/NASA NO.	KOLLSMAN PART NO.	CODE IDENT	NOMENCLATURE OR DESCRIPTION	MATERIAL	SPECIFICATION	UNIT WT
14	1		MS35234-1	74455055001		SCREW, PAN HD			
13	1		1022547	03386911816		SPRING			
12	1		1022548	03386911817		WASHER			
✓ 11	1		1022966-011	02386910510		CAP AND GASKET ASSY			
10	6		MS35249-9	74455052009		SCREW, FLAT HD			
9									
8	1		1022542	03386911811		RETAINER, PLUNGER HOUSING			
7	1		MS9068-014	74453421014		PACKING, PREFORMED "O" RING			
✓ 6	1		1022965-011	02386910511		NUT AND INSERT ASSY			
5	1		1022546	03386911815		WASHER			
4	1		1022894-011	02386910372		PLUNGER ASSY			
3	1		1022541	03386911810		HOUSING, PLUNGER			
✓ 2	1		1022556	03386911822		COVER, INSIDE			
✓ 1	1		1022971-011	02386910513		COVER ASSEMBLY			
	-011	LIST OF PARTS AND MATERIALS							

NEXT ASSY: 1022970	USED ON: 1022970	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOL ON FRACTIONS ± ~ DECIMALS ± ~ ANGLES ± ~ DO NOT SCALE THIS DRAWING	KOLLSMAN INSTRUMENT CORPORATION ELMHURST NEW YORK KIC PN 02386910512	MANNED SPACECRAFT CENTER HOUSTON, TEXAS
APPLICATION		MATERIAL ~	DRAWN AJ PERALTA DATE 8-4-65 CHECKED APPROVAL APPROVAL NOT REQUIRED PER LETTER NASA PP7-65-612	TITLE TELESCOPE COVER
		CONTRACT NAS 9-497	MIT APPROVAL	CODE IDENT NO. 89944 SIZE D NASA NUMBER 1022969
				SCALE 1/1 WEIGHT CALC ACTUAL SHEET 1 OF 1

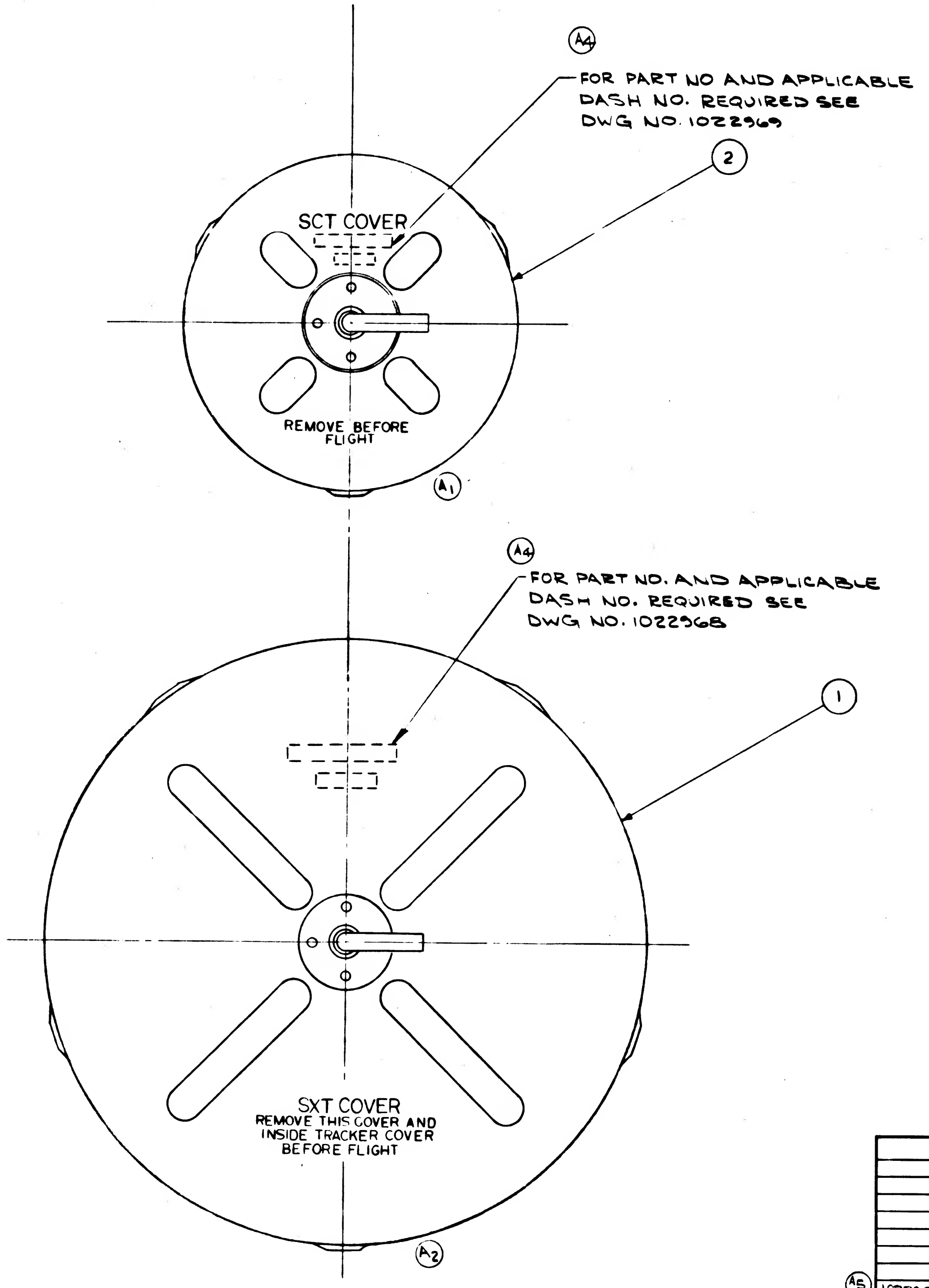
1022969

MASTER

AD-1380

K+E

NOTES
1-INTERPRET DRAWING PER MIL-D-70327.


A4
FOR PART NO AND APPLICABLE DASH NO. REQUIRED SEE DWG NO. 1022969
2
SCT COVER
REMOVE BEFORE FLIGHT
A1
A4
FOR PART NO. AND APPLICABLE DASH NO. REQUIRED SEE DWG NO. 1022968
1
SXT COVER
REMOVE THIS COVER AND INSIDE TRACKER COVER BEFORE FLIGHT
A2

REVISIONS 2306

SYM	ZONE	DESCRIPTION	DATE	APPROVAL
—		INTIAL RELEASE CLASS A PER TDRR 23061		
A5	—	REVISED PER ECO 15793 TDRR 25554 DATE 1/28/66	2/8/66 BJR	JM 2/10/66

ITEM NO.	QTY REQD	SYM	GOVERNMENT/NASA NO.	KOLLSMAN PART NO.	CODE IDENT	NOMENCLATURE OR DESCRIPTION	MATERIAL	SPECIFICATION	UNIT WT
2	1		1022969-011	02386910512		TELESCOPE PROTECTIVE COVER			
1	1		1022968-011	02386910508		SEXTANT PROTECTIVE COVER			
	011								

LIST OF PARTS AND MATERIALS

NEXT ASSY	USED ON
1022980	1022980

A5

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOL ON FRACTIONS ± — DECIMALS ± — ANGLES ± —
DO NOT SCALE THIS DRAWING
MATERIAL —
CONTRACT NAS 9-497

KOLLSMAN INSTRUMENT CORPORATION
ELMHURST NEW YORK
KIC PN 01386910066
DRAWN A.L. Rhodes DATE 6-4-65
CHECKED [illegible] 6-5-65
APPROVAL [illegible]
APPROVAL [illegible]
NASA APPROVAL [illegible]
MIT APPROVAL [illegible]

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

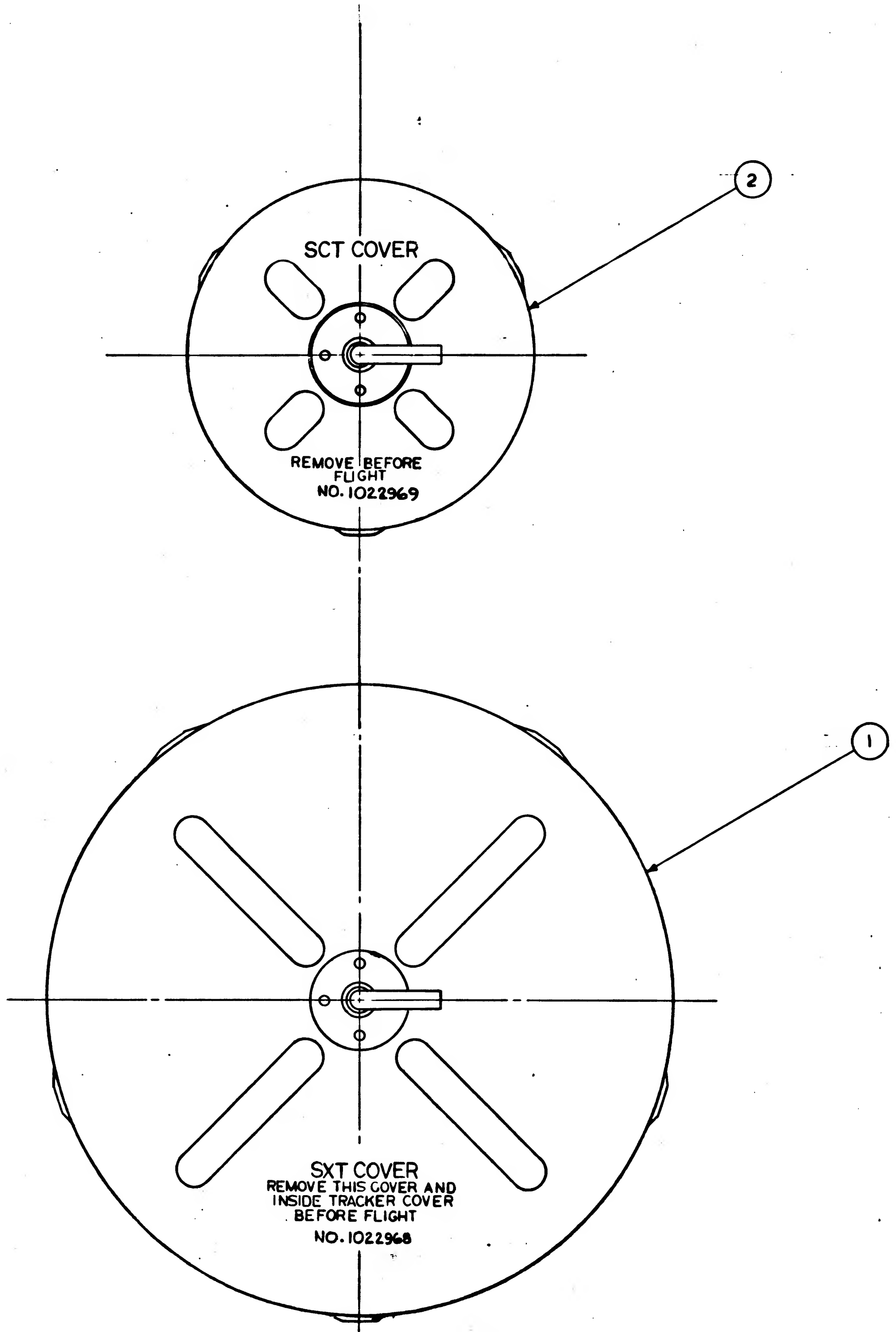
TITLE
PROTECTIVE COVERS FOR
SXT AND SCT

CODE IDENT NO. 89944
SIZE D
NASA NUMBER 1022970
SCALE 1/1
WEIGHT
CALC
ACTUAL
SHEET 1 OF 1

1022970 A

NOTES
1-INTERPRET DRAWING PER MIL-D-70327.

REVISIONS 23061				
SYM	ZONE	DESCRIPTION	DATE	APPROVAL
—	—	INTIAL RELEASE CLASS A PER TDRR		



MASTER

ITEM NO.	QTY REQD	SYM	GOVERNMENT/NASA NO.	KOLLSMAN PART NO.	CODE IDENT	NOMENCLATURE OR DESCRIPTION	MATERIAL	SPECIFICATION	UNIT WT
2	1		1022969-011	02386910512		TELESCOPE PROTECTIVE COVER			
1	1		1022968-011	02386910508		SEXTANT PROTECTIVE COVER			
	011	LIST OF PARTS AND MATERIALS							

NEXT ASSY	USED ON
1900030	

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOL ON: FRACTIONS ± — DECIMALS ± — ANGLES ± —
DO NOT SCALE THIS DRAWING
MATERIAL —
CONTRACT NAS 9-497

KOLLSMAN INSTRUMENT CORPORATION
ELMHURST NEW YORK
KIC PN 01386910066
DRAWN R.L. Rhodes DATE 8-4-65
CHECKED 8-5-65
APPROVAL
APPROVAL
NOT REQUIRED PER LETTER NASA PP7-65-612
NASA APPROVAL 9/3/65
MIT APPROVAL

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

TITLE
PROTECTIVE COVERS FOR
SXT AND SCT

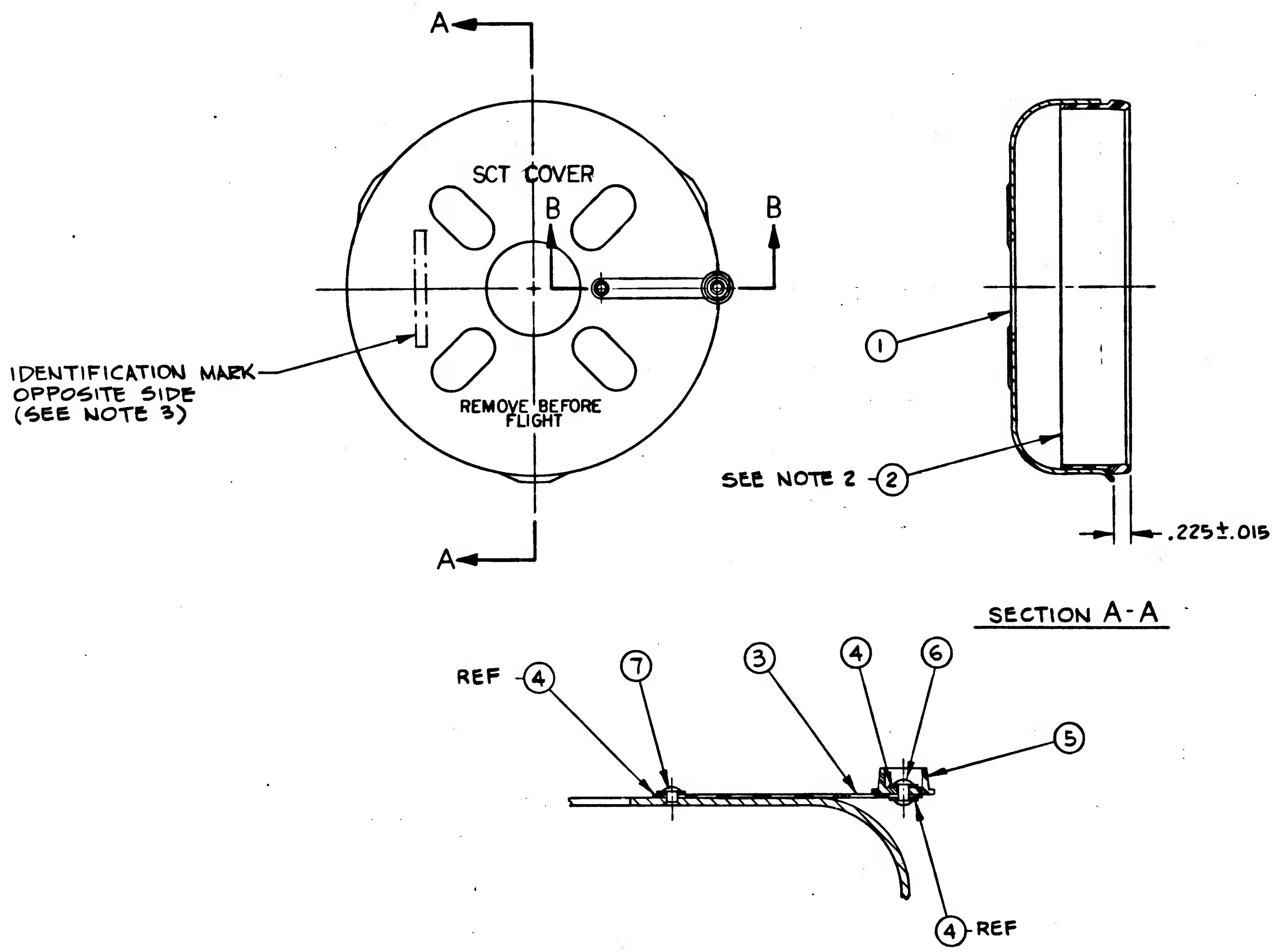
CODE IDENT NO. 89944
SIZE D
NASA NUMBER 1022970
SCALE 1/1
WEIGHT CALC ACTUAL
SHEET 1 OF 1

1022970

REVISIONS				23061
SYM	ZONE	DESCRIPTION	DATE	APPROVAL
—	—	INITIAL RELEASE CLASS A PER TDRR		

NOTES:

1. INTERPRET DRAWING PER MIL-D-70327.
2. CEMENT ITEM 2 TO ITEM 1 PER MIL-A-25457.
3. IDENTIFY USING NASA DWG NO., REVISION LETTER AND MANUFACTURER'S SYMBOL PER ND1002019.



SECTION A-A

PARTIAL SECTION B-B
SCALE 2:1

ITEM NO.	QTY REQD -011	SYM	GOVERNMENT/NASA NO.	KOLLSMAN PART NO.	CODE IDENT	NOMENCLATURE OR DESCRIPTION	MATERIAL	SPECIFICATION	UNIT WT
7	1		MS20426A2-3	74 03700 0002		RIVET, SOLID 100° CSK HEAD			
6	1		MS20470B2-3	7437000 0001		RIVET, SOLID UNIVERSAL HEAD			
5	1		1022430	03386911391		PLUG, CAP			
4	3		MS15795-801			WASHER, FLAT			
3	1		1022431-002	03386911392		STRAP			
2	1		1022554	03386911826		SEAL, RING			
1	1		1022555	03386911823		COVER, OUTSIDE			

LIST OF PARTS AND MATERIALS

NEXT ASSY	USED ON
1022969	1022970

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOL ON: FRACTIONS ± ~ DECIMALS ± ~ ANGLES ± ~
DO NOT SCALE THIS DRAWING
MATERIAL ~
CONTRACT NAS 9-497

KOLLSMAN INSTRUMENT CORPORATION
ELMHURST NEW YORK
KIC PN 02386910513
DRAWN AJ PERALTA DATE 8-4-65
CHECKED 8-5-65
APPROVAL 8-5-65
APPROVAL
NOT REQUIRED PER LETTER NASA PP7-65 612
MIT APPROVAL

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

TITLE COVER ASSEMBLY

CODE IDENT NO. 89944
SIZE D
NASA NUMBER 1022971
SCALE 1/1
WEIGHT
CALC ACTUAL
SHEET 1 OF 1

MASTER

NOTES:
1. INTERPRET DRAWING PER MIL-D-70327.
2. THIS DRAWING FOR REF ONLY

REVISIONS				
SYM	ZONE	DESCRIPTION	DATE	APPROVAL
—	—	INITIAL RELEASE CLASS A PER TDRR 24330		
A4		REVISED PER ECO 115753 TDRR G27284 DATE: 3-7-66	3-18-66 A.L.R.	BJR 3/22/66

ITEM NO.	QTY REQD	SYM	GOVERNMENT/NASA NO.	KOLLSMAN PART NO.	CODE IDENT	NOMENCLATURE OR DESCRIPTION	MATERIAL	SPECIFICATION	UNIT WT
12	1		1022784-011			LENS AND PLUG COVER SET			
11	1	*	1001844-5			CAP, PROTECTIVE			
10	1	*	1001844-4			CAP, PROTECTIVE			
9	1		1022963-011			STAR TRACKER COVER ASSY			
8	2		1022893-011			GAS INJECTION VALVE ASSY			
7	1		1022781-011			TELESCOPE COVER ASSY			
6	1		1022780-011			SEXTANT COVER ASSY			
5	1	*	1001926-001			CAP, PPOTECTIVE			
4	1		1019845			COVER AND SCREW ASSEMBLY			
3	1		1019844			COVER AND SCREW ASSEMBLY			
2	1		1022880-011	01386910055		LENS COVERS SET			
1	1		1022970-011	01386910066		PROTECTIVE COVERS FOR SXT AND SCT			
	-011								

(A4)

LIST OF PARTS AND MATERIALS

(A1)

* VENDOR ITEM - REFER TO SPECIFICATION CONTROL DRAWING BEFORE ORDERING.

(A2) 1900030	
NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES

TOL ON	FRACTIONS	DECIMALS	ANGLES
	± ~	± ~	± ~

DO NOT SCALE THIS DRAWING

MATERIAL —

CONTRACT NAS 9-497

KOLLSMAN INSTRUMENT CORPORATION
ELMHURST NEW YORK
KIC PN 02336910541

DRAWN AJ PERALTA DATE 10-26-65
CHECKED F Plesche 11/1/65
APPROVAL 11-1-65
APPROVAL

NASA APPROVAL A. C. METZGER
MIT APPROVAL 24 Mar 66

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

TITLE
SXT-SCT COVERS
(A3) (REFERENCE DRAWING)

CODE IDENT NO.	SIZE	NASA NUMBER
89944	C	1022980

SCALE ~ WEIGHT CALC ACTUAL SHEET 1 OF 1

1022980 A

AD-1340

NOTES:

1. INTERPRET DRAWING PER MIL-D-70327.

(B1) ~~2. THIS DRAWING FOR REF ONLY~~

REVISIONS				
SYM	ZONE	DESCRIPTION	DATE	APPROVAL
(M) —	—	INITIAL RELEASE CLASS A PER TDRR 24330		
(M) A4		REVISED PER ECO 115753 TDRR G27284 DATE: 3-7-66	3-18-66 A.L.R	BJR 3/22/66
B5		REVISED PER TDRR G28232 DATE 4-26-66	AJP 4-28-66	E.I. 5/4/66

(B4) (A4) (B3)

ITEM NO.	QTY REQD	SYM	GOVERNMENT/NASA NO.	KOLLSMAN PART NO.	CODE IDENT	NOMENCLATURE OR DESCRIPTION	MATERIAL	SPECIFICATION	UNIT WT
12	1		1022784-011			LENS AND PLUG COVER SET			
~~11~~	~~1~~	~~*~~	~~1001844-5~~			~~CAP, PROTECTIVE~~			
~~10~~	~~1~~	~~*~~	~~1001844-4~~			~~CAP, PROTECTIVE~~			
~~9~~	~~1~~		~~1022963-011~~			~~STAR TRACKER COVER ASSY~~			
~~8~~	~~2~~		~~1022893-011~~	—		~~GAS INJECTION VALVE ASSY~~			
7	1		1022781-011	—		TELESCOPE COVER ASSY			
6	1		1022780-011	—		SEXTANT COVER ASSY			
~~5~~	~~1~~	~~*~~	~~1001926-001~~	—		~~CAP, PROTECTIVE~~			
4	1		1019845	—		COVER AND SCREW ASSEMBLY			
3	1		1019844	—		COVER AND SCREW ASSEMBLY			
2	1		1022880-011	01386910055		LENS COVERS SET			
1	1		1022970-011	01386910066		PROTECTIVE COVERS FOR SXT AND SCT			
	-011	LIST OF PARTS AND MATERIALS							

(A1) (B2)

~~* VENDOR ITEM - REFER TO SPECIFICATION CONTROL DRAWING BEFORE ORDERING.~~

APPLICATION	
NEXT ASSY	USED ON
(A2) 1900030	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOL ON: FRACTIONS ± ~ DECIMALS ± ~ ANGLES ± ~
DO NOT SCALE THIS DRAWING
MATERIAL —
CONTRACT NAS 9-497

KOLLSMAN INSTRUMENT CORPORATION
ELMHURST NEW YORK
KIC PN 02386910541
DRAWN AJ PERALTA DATE 10-26-65
CHECKED F Plesche 11/1/65
APPROVAL [illegible] 11-1-65
APPROVAL
NASA APPROVAL A. C. METZGER
MIT APPROVAL [illegible] 24 MAR 66

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

TITLE OUA EYEPIECE AND LENS COVERS (A3) (B5)

CODE IDENT NO. 89944
SIZE C
NASA NUMBER 1022980
SCALE ~
WEIGHT CALC ACTUAL
SHEET 1 OF 1

1022980

AD-1340

NOTES:
1. INTERPRET DRAWING PER MIL-D-70327.
(B1) ~~2. THIS DRAWING FOR REF ONLY.~~

REVISIONS				
SYM	ZONE	DESCRIPTION	DATE	APPROVAL
—	—	INITIAL RELEASE CLASS A PER TDRR 24330		
A4		REVISED PER ECO 115753 TDRR G27284 DATE: 3-7-66	3-16-66 A-R	BJR 3/22/66
B5		REVISED PER TDRR G28232 DATE 4-26-66	AJP 4-28-66	5/4/66
C1		REVISED PER ECO 113461 TDRR G33976 DATE 6-15-67	BJR 6-20-67	6/20/67
D1		REVISED PER ECO 121109 TDRR G36293 DATE 6-6-68	BJR 6-19-68	6/25/68

(B4) (D1) (A4) (B3) (C1)

	ITEM NO.	QTY REQD	SYM	GOVERNMENT/NASA NO.	KOLLSMAN PART NO.	CODE IDENT	NOMENCLATURE OR DESCRIPTION	MATERIAL	SPECIFICATION	UNIT WT
1	12	1		1022784-011			LENS AND PLUG COVER SET			
	~~11~~	~~1~~	~~*~~	~~1001844-5~~			~~CAP, PROTECTIVE~~			
	~~10~~	~~1~~	~~*~~	~~1001844-4~~			~~CAP, PROTECTIVE~~			
	~~9~~	~~1~~		~~1022963-011~~			~~STAR TRACKER COVER ASSY~~			
	~~8~~	~~2~~		~~1022893-011~~			~~GAS INJECTION VALVE ASSY~~			
	~~7~~	~~1~~		~~1022781-011~~			~~TELESCOPE COVER ASSY~~			
	~~6~~	~~1~~		~~1022780-011~~			~~SEXTANT COVER ASSY~~			
	~~5~~	~~1~~	~~*~~	~~1001926-001~~			~~CAP, PROTECTIVE~~			
1	4	1		1019845			COVER AND SCREW ASSEMBLY			
1	3	1		1019844			COVER AND SCREW ASSEMBLY			
1	2	1		1022880-011	01386910055		LENS COVERS SET			
	~~1~~	~~1~~		~~1022970-011~~	~~01386910066~~		~~PROTECTIVE COVERS FOR SXT AND SCT~~			
-021		-011	LIST OF PARTS AND MATERIALS							

(A1) (B2)
~~* VENDOR ITEM - REFER TO SPECIFICATION CONTROL DRAWING BEFORE ORDERING.~~

APPLICATION	
NEXT ASSY	USED ON
(A2) 1900030	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOL ON: FRACTIONS ± — DECIMALS ± — ANGLES ± —
DO NOT SCALE THIS DRAWING
MATERIAL —
CONTRACT NAS 9-497

KOLLSMAN INSTRUMENT CORPORATION
ELMHURST NEW YORK
KIC PN 02386910541
DRAWN AJ PERALTA DATE 10-26-65
CHECKED F Plesche 11/1/65
APPROVAL 11-1-65
APPROVAL
NASA APPROVAL A. C. METZGER
MIT APPROVAL

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

TITLE
OUA EYEPIECE AND
LENS COVERS
(A3) (B5)

CODE IDENT NO. 89944
SIZE C
NASA NUMBER 1022980
SCALE —
WEIGHT CALC ACTUAL
SHEET 1 OF 1

1022980

AD-1340

NOTES:

1. INTERPRET DRAWING PER MIL-D-70327.
2. THIS DWG IS FOR REF. ONLY

REVISIONS

SYM	ZONE	DESCRIPTION	DATE	APPROVAL
—	—	INITIAL RELEASE CLASS A PER TDRR 24330		

ITEM NO.	QTY REQD	SYM	GOVERNMENT/NASA NO.	KOLLSMAN PART NO.	CODE IDENT	NOMENCLATURE OR DESCRIPTION	MATERIAL	SPECIFICATION	UNIT WT
2	1		1022880-011	01386910055		LENS COVERS			
1	1		1022970-011	01386910066		PROTECTIVE COVERS FOR SXT AND SCT			
	-011								

LIST OF PARTS AND MATERIALS

NEXT ASSY	USED ON
1022978	

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES

TOL ON	FRACTIONS	DECIMALS	ANGLES
	± ~	± ~	± ~

DO NOT SCALE THIS DRAWING

MATERIAL —

CONTRACT NAS 9-497

KOLLSMAN INSTRUMENT CORPORATION
ELMHURST NEW YORK

KIC PN 02386910541

DRAWN AJ PERALTA DATE 10-26-65
CHECKED 11/1/65
APPROVAL 11-1-65
APPROVAL

A. C. METZGER
NASA APPROVAL
MIT APPROVAL 24 Nov 65

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

TITLE SXT-SCT LENS COVERS

CODE IDENT NO.	SIZE	NASA NUMBER
89944	C	1022980

SCALE ~ WEIGHT CALC ACTUAL SHEET 1 OF 1

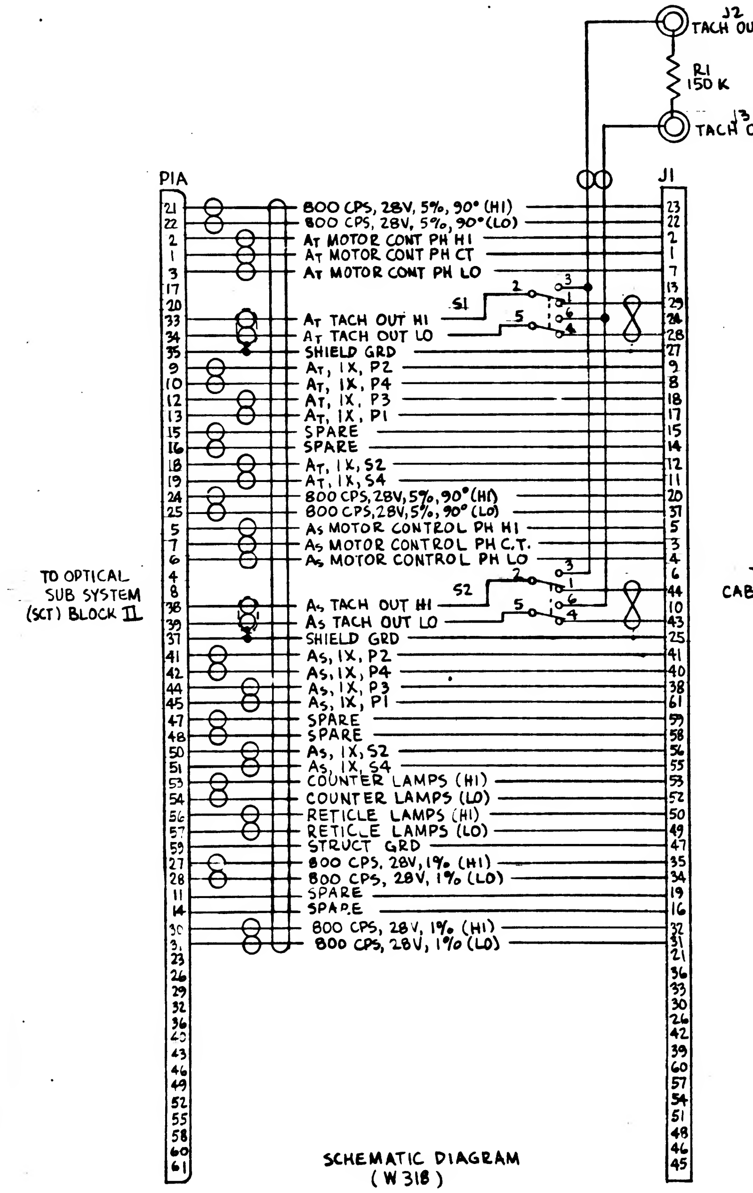
AD-1340

SYM	ZONE	REVISIONS DESCRIPTION	DATE	APPROVAL

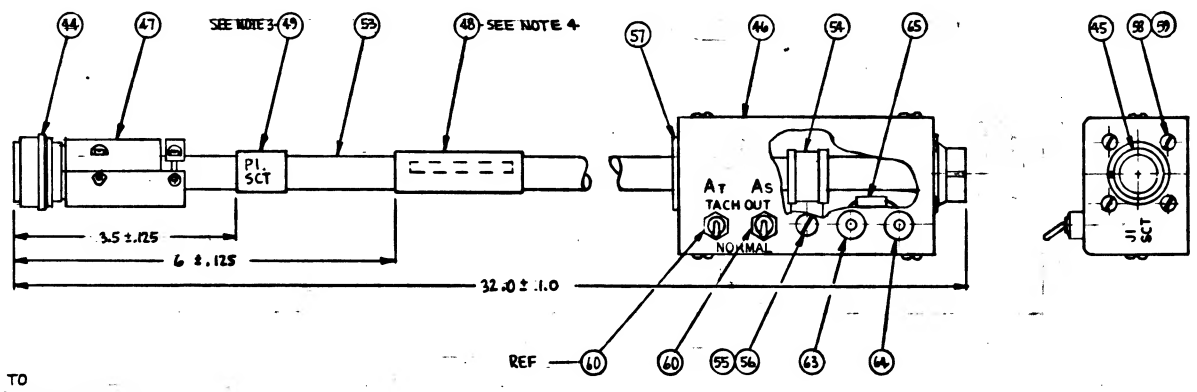
NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH MIL-D-7032T.
2. WIRE PER ND 1002032
3. SHRINK AND MARK PER ND 1002019
4. SHRINK AND IDENTIFY USING NASA PART NO., REVISION LETTER MANUFACTURER'S SYMBOL AND CABLE NO. (W318) PER ND 1002019.
5. FOR SHIELDED WIRES, THE OUTER JACKET COLOR PRECEDES THE SLASH, FOLLOWED BY THE INNER CONDUCTOR INSULATION COLOR.
6. CRIMP PER ND 1002206
7. CONDUCTORS SHALL HAVE FERRULES STAGGERED TO PREVENT OVERLAP WHENEVER TWO OR MORE ARE REQD IN ONE BUNDLE.
8. SOLDER PER ND 1002071
9. WIRE LENGTH TOLERANCES SHALL BE AS FOLLOWS:
   LENGTHS UP TO 1" ±.062
   LENGTHS OVER 1" TO 6" ±.125
   LENGTHS OVER 6" TO 12" ±.250
   LENGTHS OVER 12" TO 36" ±.500
10. MIL-I-631, TYPE F, FORM U, GRADE C, CLASS 1, CATEGORY 1 ID 5/8, COLOR - BLK.
11. WIRE TO CONFORM WITH ND 1002181, TYPE I, CLASS 1 EXCEPT FOR SECTION 4 (QUALITY ASSURANCE PROVISION).
12. WIRE TO CONFORM WITH ND 1002181, TYPE II, CLASS 8 EXCEPT FOR SECTION 4 (QUALITY ASSURANCE PROVISION).
13. FOUR PAN HD SHEET METAL SCREWS (NO. 6 x .188 LG. CRES) FURNISHED WITH ITEM NO. 46

	CONDUCTOR NO	ITEM NO.	COLOR	LENGTH	ROUTE	FROM COMPONENT	TO COMPONENT	REFERENCE
TWIST	1	1	ORN	35"		P1 -21	J1 -23	
	2	2	YEL			22	22	
TWIST	3	3	GRN			2	2	
	4	4	BLU			1	1	
	5	5	BRN			3	7	
TWIST	6	6	RED			27	35	
	7	7	WHT-BLK	35"		28	J1 - 34	
	8	42	BLK/BLK BLK/WHT	36" 36"		33 34	S1-2 S1-5	SEE FIG. 1
	9	38	WHT-BRN	3"		P1 - 35	SHLD COND 8	SEE FIG. 1
	10	39	WHT-RED	32"		SHLD COND 8	J1 - 27	SEE FIG. 1
TWIST	11	8	WHT-ORN	35"		P1A - 9	9	
	12	9	WHT-YEL			10	8	
TWIST	13	10	WHT-GRN			12	18	
	14	11	WHT-BLU			13	17	
TWIST	15	12	WHT-VIO			15	15	
	16	13	WHT-GY			16	14	
TWIST	17	14	WHT-ORN-GRN			18	12	
	18	15	WHT-BLK-RED			19	11	
TWIST	19	16	WHT-YEL-GY			24	20	
	20	17	WHT-BLK-YEL			25	37	
TWIST	21	18	WHT-BLK-GRN			5	5	
	22	19	WHT-BLK-BLU			7	3	
	23	20	WHT-BLK-GY			6	4	
TWIST	24	21	WHT-BLK-VIO			30	32	
	25	22	WHT-BRN-RED	35"		31	J1 -31	
	26	43	BLK/VIO BLK/GY	36" 36"		38 39	S2-2 S2-5	SEE FIG. 2
	27	40	WHT-BRN-ORN	3"		P1A - 37	SHLD COND 26	SEE FIG. 2
	28	41	WHT-BRN-YEL	32"		SHLD COND 26	J1 -25	SEE FIG. 2
TWIST	29	23	WHT-GRN-BLU	35"		P1 -41	41	
	30	24	WHT-BRN-BLU			42	40	
TWIST	31	25	WHT-BRN-VIO			44	38	
	32	26	WHT-BRN-GY			45	61	
TWIST	33	27	WHT-RED-ORN			47	59	
	34	28	WHT-RED-YEL			48	58	
TWIST	35	29	WHT-RED-GRN			50	56	
	36	30	WHT-ORN-YEL			51	55	
TWIST	37	31	WHT-ORN-BLU			53	53	
	38	32	WHT-ORN-VIO			54	52	
TWIST	39	33	WHT-YEL-GRN			56	50	
	40	34	WHT-YEL-BLU	35"		57	49	
	41	35	WHT-YEL-VIO	32"		59	47	
	42	36	WHT-GRN-GY	32"		11	19	
	43	37	WHT-BLU-GY	32"		P1 - 14	- 16	
TWIST	44	38	WHT-BRN	4"		S1- 1	- 29	
	45	40	WHT-BRN-ORN			S1 - 4	28	
TWIST	46	19	WHT-BLK-BLU			S2 - 1	44	
	47	4	BLU			S2-4	J1 - 43	
TWIST	48	1	ORN			S1-3	S2-3	
	49	2	YEL			S1-6	S2-6	
TWIST	50	1	ORN			S2-3	J2	
	51	2	YEL	4"		S2-6	J3	



SCHEMATIC DIAGRAM
(W318)



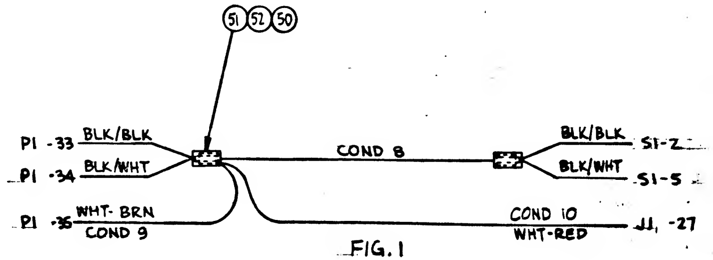


FIG. 1

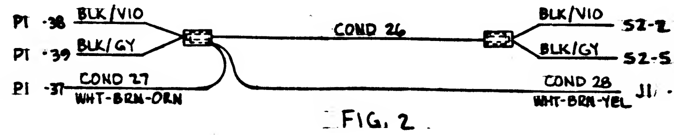


FIG. 2

MASTER

ITEM NO.	QTY REQD	SYM	GOVERNMENT/NASA NO.	KOLLSMAN PART NO.	CODE IDENT	NOMENCLATURE OR DESCRIPTION	MATERIAL	SPECIFICATION	UNIT WT
66	REF		1022989			INTERCONNECTION DIAGRAM			
65	1		1001716-84	65180144084		RESISTOR, FIXED, FILM, INSULATED (R1)			
64	1		1001920-002			JACK, INSULATED BANANA			
63	1		1001920-001			JACK, INSULATED BANANA			
62									
61									
60	2		1001919			SWITCH TOGGLE			
59	4		MS21042-04			NUT, SELF-LOCK			
58	4		MS35233-15	74455185015		SCREW, PAN HD			
57	1		MS35489-17			GROMMET, RUBBER			
56	1		MS21042-08			NUT, SELF-LOCK			
55	1		MS35233-45	74455185045		SCREW, PAN HD			
54	1		MS21919-WG8			CLAMP, CUSHION			
53	30"		SEE NOTE 10	60025050003		INSULATION, SLEEVING			
52	4	*	1001707-12	74094045024		FERRULE			
51	4	*	1001711-8	74094045003		FERRULE			
50	4	*	1001732-136	60025035009		INSULATION SLEEVING			
49	2	*	1015865-155	60025035060		INSULATION SLEEVING			
48	1	*	1015865-455	60025035060		INSULATION SLEEVING			
47	1	*	1001918-011			CLAMP, CABLE			
46	1	*	1022609			ENCLOSURE ELECTRONIC			
45	1	*	1001829-26			CONNECTOR, RECEPTACLE			
44	1	*	1001792-207			CONNECTOR, PLUG			
43	37"		SEE NOTE 12	60521052245		CABLE ELECTRICAL (BLK/VIO, GY)		(AWG 22)	
42	27"		SEE NOTE 12	60521052201		CABLE ELECTRICAL (BLK/WHT BLK)			
41	33"		SEE NOTE 11	60601052230		WIRE, ELECTRICAL (WHT-BRN-YEL)			
40	8"			2229		(WHT-BRN-ORN)			
39	23"			2213		(WHT-RED)			
38	8"			2212		(WHT-BRN)			
37	33"			2254		(WHT-BLU-GY)			
36	33"			2252		(WHT-GRN-GY)			
35	33"			2248		(WHT-YEL-VIO)			
34	36"			2247		(WHT-YEL-BLU)			
33	36"			2246		(WHT-YEL-GRN)			
32	36"			2244		(WHT-ORN-VIO)			
31	36"			2243		(WHT-ORN-BLU)			
30	40"			2241		(WHT-ORN-YEL)			
29	36"			2237		(WHT-RED-GRN)			
28				2236		(WHT-RED-YEL)			
27				2235		(WHT-RED-ORN)			
26				2234		(WHT-BRN-GY)			
25				2233		(WHT-BRN-VIO)			
24				2232		(WHT-BRN-BLU)			
23				2250		(WHT-GRN-BLU			
22				2228		(WHT-BRN-RED)			
21				2226		(WHT-BLK-VIO)			
20	36"			2227		(WHT-BLK-GY)			
19	40"			2225		(WHT-BLK-BLU)			
18	36"			2224		(WHT-BLK-GRN)			
17				2223		(WHT-BLK-YEL)			
16				2249		(WHT-YEL-GY			
15				2221		(WHT-BLK-RED)			
14				2242		(WHT-ORN-GRN)			
13				2219		(WHT-GY)			
12				2218		(WHT-VIO)			
11				2217		(WHT-BLU)			
10				2216		(WHT-GRN)			
9				2215		(WHT-YEL)			
8				2214		(WHT-ORN)			
7				2211		(WHT-BLK)			
6				2203		(RED)			
5	36"			2202		(BRN)			
4	40"			2207		(BLU)			
3	36"			2206		(GRN)			
2	44"			2205		(YEL)			
1	44"		SEE NOTE 11	60601052204		WIRE, ELECTRICAL (ORN)		(AWG 22)	
	-011		LIST OF PARTS AND MATERIALS						

*VENDOR ITEM - SEE SOURCE CONTROL OR SPECIFICATION DRAWING

NEXT ASSY	USED ON
1016949	1016949

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOL ON FRACTIONS ± — DECIMALS ± — ANGLES ± —
DO NOT SCALE THIS DRAWING
MATERIAL —
CONTRACT NAS 9-497

KOLLSMAN INSTRUMENT CORPORATION
ELMHURST NEW YORK
KIC PN 02386910555
DRAWN J. MARGIOTTA DATE 11-18-65
CHECKED E. F. SCHROEDER 12-10-65
APPROVAL R. Feuer 12-10-65
APPROVAL
A. C. METZGER
NASA APPROVAL
MIT APPROVAL

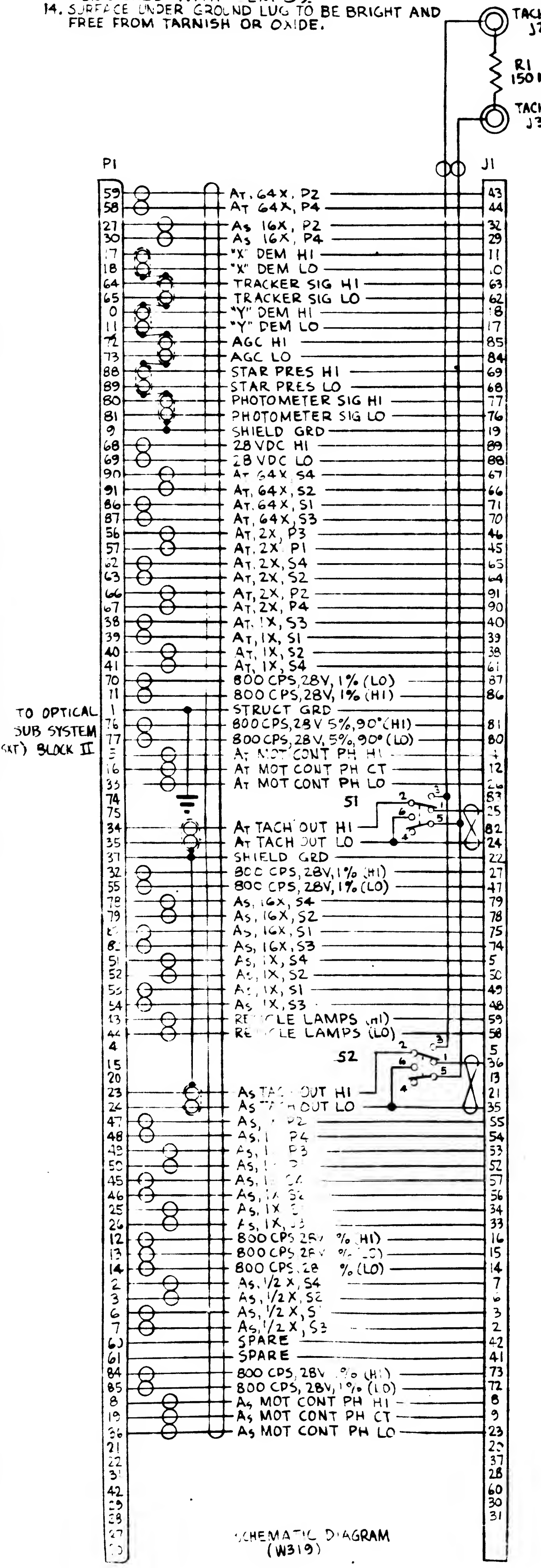
MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

TITLE CABLE ASSEMBLY, SPECIAL PURPOSE, ELECTRICAL, BRANCHED (W318)

CODE IDENT NO. 89944 SIZE E NASA NUMBER 1022982
SCALE NONE WEIGHT CALC ACTUAL SHEET OF

NOTES

1. INTERPRET DRAWING IN ACCORDANCE WITH MIL-D-70327
2. WIRE PER ND1002032
3. SHRINK AND MARK PER ND 1002019
4. SHRINK AND IDENTIFY USING NASA PART NO., REVISION LETTER MANUFACTURER'S SYMBOL AND CABLE NO. (W319) PER ND1002019.
5. FOR SHIELDED WIRES, THE OUTER JACKET COLOR PROCEDES THE SLASH, FOLLOWED BY THE INNER CONDUCTOR INSULATION COLOR.
6. CRIMP PER ND1002206.
7. CONDUCTORS SHALL HAVE FERRULES STAGGERED TO PREVENT OVERLAP WHENEVER TWO OR MORE ARE REQUIRED IN ONE BUNDLE
8. WIRE LENGTH TOLERANCES SHALL BE AS FOLLOWS.
   LENGTHS UP TO 1" ± .062
   LENGTHS OVER 1" TO 6" ± .125
   LENGTHS OVER 6" TO 12" ± .250
   LENGTHS OVER 12" TO 36" ± .500
9. SOLDER PER ND1002071.
10. MIL-I-631, TYPE F, FORM U, GRADE C, CLASS I, CATEGORY 1, ID 1" DIA, COLOR-BLK
11. WIRE TO CONFORM WITH ND1002181, TYPE I, CLASS I EXCEPT FOR SECTION 4 (QUALITY ASSURANCE PROVISION)
12. WIRE TO CONFORM WITH ND1002181, TYPE II, CLASS 8 EXCEPT FOR SECTION 4 (QUALITY ASSURANCE PROVISION)
13. FOUR PAN HD. SHEET METAL SCREWS (NO. 6 x .188 LG. CRES) FURNISHED WITH ITEM 59.
14. SURFACE UNDER GROUND LUG TO BE BRIGHT AND FREE FROM TARNISH OR OXIDE.



SCHEMATIC DIAGRAM (W319)

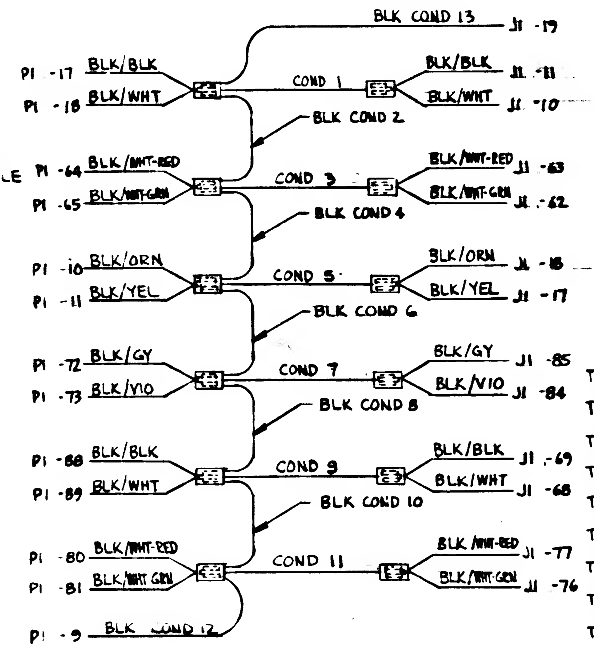


FIG. 1

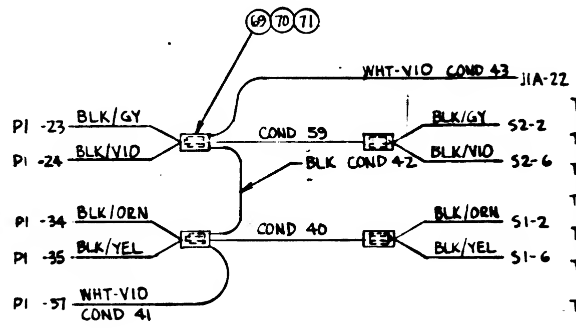
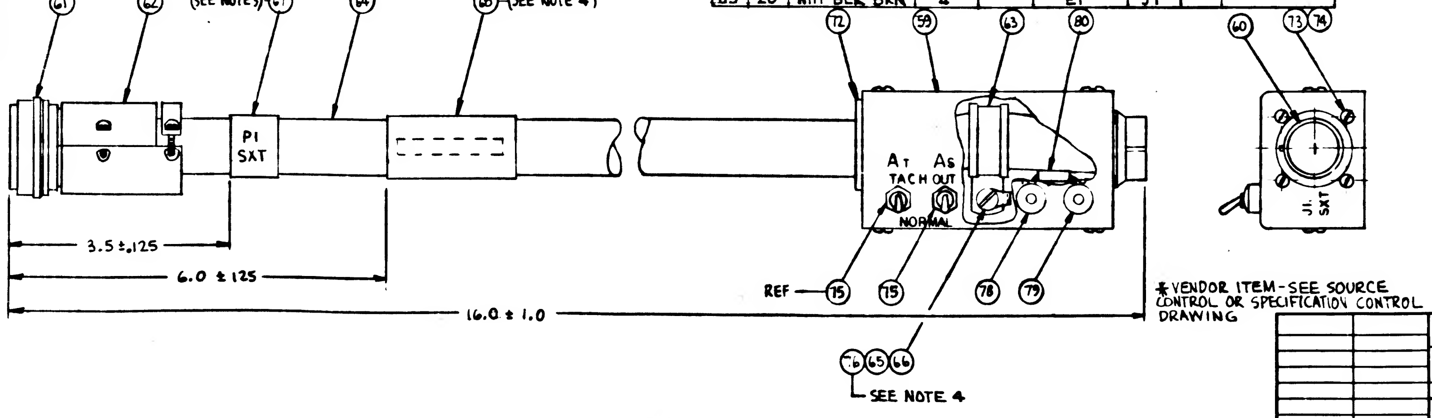


FIG. 2

	CONDUCTOR NO.	ITEM NO.	COLOR	LENGTH	ROUTE	FROM COMPONENT	TO COMPONENT	REFERENCE
	1	55	BLK/BLK BLK/WHT	16" 16"		P1-17 P1-18	J1-11 J1-10	SEE FIG. 1
	2	1	BLK	3"		SHLD COND 1	SHLD COND 3	
	3	56	BLK/WHT-RED BLK/WHT-GRN	16" 16"		P1-64 P1-65	J1-63 J1-62	
	4	1	BLK	3"		SHLD COND 3	SHLD COND 5	
	5	57	BLK/ORN BLK/YEL	16" 16"		P1-10 P1-11	J1-18 J1-17	
	6	1	BLK	3"		SHLD COND 5	SHLD COND 7	
	7	58	BLK/GY BLK/VIO	16" 16"		P1-72 P1-73	J1-85 J1-84	
	8	1	BLK	3"		SHLD COND 7	SHLD COND 9	
	9	55	BLK/BLK BLK/WHT	16" 16"		P1-88 P1-89	J1-69 J1-68	
	10	1	BLK	3"		SHLD COND 9	SHLD COND 11	
	11	56	BLK/WHT-RED BLK/WHT-GRN	16" 16"		P1-80 P1-81	J1-77 J1-76	
	12	1	BLK	3"		P1-9	SHLD COND 11	
	13	1	BLK	16"		SHLD COND 1	J1-19	SEE FIG. 1
TWIST	14	2	BRN	17.5		P1-68	89	
	15	3	RED			69	88	
TWIST	16	4	ORN			90	67	
	17	5	YEL			91	66	
TWIST	18	6	GRN			86	71	
	19	7	BLU			87	70	
TWIST	20	8	VIO			56	46	
	21	9	GY			57	45	
TWIST	22	10	WHT			62	65	
	23	11	WHT-BLK			63	64	
TWIST	24	12	WHT-BRN			66	91	
	25	13	WHT-RED			67	90	
TWIST	26	14	WHT-ORN			38	40	
	27	15	WHT-YEL			39	39	
TWIST	28	16	WHT-GRN			40	38	
	29	17	WHT-BLU			41	61	
TWIST	30	18	WHT-VIO			70	87	
	31	19	WHT-GY	17.5		71	J1-86	
	32	20	WHT-BLK-BRN	16.0		1	E1	
TWIST	33	21	WHT-BLK-RED	17.5		76	J1-81	
	34	22	WHT-BLK-ORN			77	80	
TWIST	35	23	WHT-BLK-YEL			5	4	
	36	24	WHT-BLK-GRN			16	12	
	37	25	WHT-BLK-BLU			33	26	
TWIST	38	26	WHT-BLK-VIO			84	73	
	39	27	WHT-BLK-GY	17.5"		85	J1-72	
	40	57	BLK/ORN BLK/YEL	19" 19"		34 35	S1-2 S1-6	SEE FIG. 2
	41	18	WHT-VIO	3"		P1-37	SHLD COND 40	SEE FIG. 2
	42	1	BLK	3"		SHLD COND 40	SHLD COND 59	SEE FIG. 2
	43	18	WHT-VIO	16"		SHLD COND 59	J1-22	SEE FIG. 2
TWIST	44	28	WHT-BRN-RED	17.5"		P1-32	27	
	45	29	WHT-BRN-ORN			55	47	
TWIST	46	30	WHT-BRN-YEL			78	79	
	47	31	WHT-BRN-GRN			79	78	
TWIST	48	32	WHT-BRN-BLU			82	75	
	49	33	WHT-BRN-VIO			83	74	
TWIST	50	34	WHT-BRN-GY			51	51	
	51	35	WHT-RED-ORN			52	50	
TWIST	52	36	WHT-RED-YEL			53	49	
	53	37	WHT-RED-GRN			54	48	
TWIST	54	38	WHT-RED-BLU			43	59	
	55	39	WHT-RED-VIO			44	58	
TWIST	56	40	WHT-RED-GY			8	8	
	57	41	WHT-ORN-YEL			19	9	
	58	42	WHT-ORN-GRN	17.5"		36	J1-23	
	59	58	BLK/GY BLK/VIO	16" 16"		23 24	S2-2 S2-6	SEE FIG. 2
TWIST	60	43	WHT-ORN-BLU	17.5"		47	J1-55	
	61	44	WHT-ORN-VIO			48	54	
TWIST	62	45	WHT-ORN-GY			49	53	
	63	46	WHT-YEL-GRN			50	52	
TWIST	64	47	WHT-YEL-BLU			45	57	
	65	48	WHT-YEL-VIO			46	56	
TWIST	66	49	WHT-YEL-GY			25	34	
	67	50	WHT-GRN-BLU			26	33	
TWIST	68	51	WHT-GRN-VIO			12	16	
	69	52	WHT-GRN-GY			13	15	
	70	53	WHT-BLU-GY			14	14	
TWIST	71	54	WHT-VIO-GY			2	7	
	72	23	WHT-BLK-YEL			3	6	
TWIST	73	25	WHT-BLK-BLU			6	3	
	74	24	WHT-BLK-GRN	17.5"		7	2	
	75	40	WHT-RED-GY	16.0"		60	42	
	76	41	WHT-ORN-YEL	16.0"		61	41	
TWIST	77	12	WHT-BRN	17.5"		30	29	
	78	28	WHT-BRN-RED	17.5"		27	32	
TWIST	79	13	WHT-RED	17.5"		58	44	
	80	38	WHT-RED-BLU	17.5"		P1-59	-43	
TWIST	81	9	GY	21"		S2-1	-36	
	82	8	VIO	21"		S2-6	35	
TWIST	83	4	ORN	21"		S1-1	25	
	84	5	YEL	21"		S1-6	J1-24	
TWIST	85	10	WHT	4"		S1-3	S2-3	
	86	1	BLK	4"		S1-5	S2-5	
TWIST	87	10	WHT	4"		S2-3	J2	
	88	1	BLK	4"		S2-5	J3	
	89	20	WHT-BLK-BRN	4"		E1	J1-1	



* VENDOR ITEM - SEE SOURCE CONTROL OR SPECIFICATION CONTROL DRAWING

REVISIONS				
SYM	ZONE	DESCRIPTION	DATE	APPROVAL
A		REVISED PER ECO 117059 TDRR 628783 DATE 5-12-66		

LIST OF PARTS AND MATERIALS

ITEM NO.	QTY REQD	SYM	GOVERNMENT/NASA NO.	KOLLSMAN PART NO.	CODE IDENT	NOMENCLATURE OR DESCRIPTION	MATERIAL	SPECIFICATION	UNIT WT
81	REF		1022989			INTERCONNECTION DIAGRAM			
80	1	*	1000716-84	68180144004		RESISTOR, FIXED FILM INSULATED (R1)			
79	1	*	1001920-002			JACK, INSULATED BANANA			
78	1	*	1001920-001			JACK, INSULATED BANANA			
77									
76	1	*	1010638-11			LUG, GROUND			
75	2	*	1001919			SWITCH, TOGGLE			
74	4		MS21042-04			NUT, SELF LOCK			
73	4		MS35233-15	7445185015		SCREW, PAN HD			
72	1	*	1001921			GROMMET, RUBBER			
71	16	*	1001707-9	7409404502A		FERRULE			
70	16	*	1001711-8	7409404503		FERRULE			
69	16	*	1001732-134	60025035009		INSULATION, SLEEVING			
68	1	*	1015865-453	60025035063		INSULATION, SLEEVING			
67	1	*	1015865-183	60025035063		INSULATION, SLEEVING			
66	1		MS21042-08			NUT, SELF LOCK			
65	1		MS35233-45	7445518504S		SCREW, PAN HD			
64	15"		SEE NOTE 10	60625050005		INSULATION SLEEVING			
63	1		MS21919-WDG14			CLAMP, CUSHION			
62	1	*	1001918-04			CLAMP, CABLE			
61	1	*	1001732-201			CONNECTOR, PLUG			
60	1	*	1001829-30			CONNECTOR, RECEPTACLE			
59	1	*	1022638			ENCLOSURE, ELECTRONIC			
58	34"		SEE NOTE 12	60521052245		CABLE, ELECTRICAL (BLK/GY, VIO) (AWG 22)			
57	37"		SEE NOTE 12	60521052231		CABLE, ELECTRICAL (BLK/ORN, YEL)			
56	34"		SEE NOTE 12	17000C07484		CABLE, ELECTRICAL (BLK/WHT-RED, WHT-GRN)			
55	34"		SEE NOTE 12	60521052201		CABLE, ELECTRICAL (BLK/BLK, WHT)			
54	18"		SEE NOTE 11	60601052255		WIRE ELECTRICAL (WHT-VIO-GY)			
53	18"			2254		(WHT-BLU-GY)			
52	18"			2252		(WHT-GRN-GY)			
51	18"			2251		(WHT-GRN-VIO)			
50	18"			2250		(WHT-GRN-BLU)			
49	18"			2249		(WHT-YEL-GY)			
48	18"			2248		(WHT-YEL-VIO)			
47	18"			2247		(WHT-YEL-BLU)			
46	18"			2246		(WHT-YEL-GRN)			
45	18"			2245		(WHT-ORN-GY)			
44	18"			2244		(WHT-ORN-VIO)			
43	18"			2243		(WHT-ORN-BLU)			
42	18"			2242		(WHT-ORN-GRN)			
41	35"			2241		(WHT-ORN-YEL)			
40	35"			2240		(WHT-RED-GY)			
39	18"			2239		(WHT-RED-VIO)			
38	36"			2238		(WHT-RED-BLU)			
37	18"			2237		(WHT-RED-GRN)			
36	18"			2236		(WHT-RED-YEL)			
35	18"			2235		(WHT-RED-ORN)			
34	18"			2234		(WHT-BRN-GY)			
33	18"			2233		(WHT-BRN-VIO)			
32	18"			2232		(WHT-BRN-BLU)			
31	18"			2231		(WHT-BRN-GRN)			
30	18"			2230		(WHT-BRN-YEL)			
29	18"			2229		(WHT-BRN-ORN)			
28	42"			2228		(WHT-BRN-RED)			
27	18"			2227		(WHT-BLK-GY)			
26	18"			2226		(WHT-BLK-VIO)			
25	36"			2225		(WHT-BLK-BLU)			
24	36"			2224		(WHT-BLK-GRN)			
23	36"			2223		(WHT-BLK-YEL)			
22	18"			2222		(WHT-BLK-ORN)			
21	18"			2221		(WHT-BLK-RED)			
20	22"			2220		(WHT-BLK-BRN)			
19	18"			2219		(WHT-GY)			
18	35"			2218		(WHT-VIO)			
17	18"			2217		(WHT-BLU)			
16	18"			2216		(WHT-GRN)			
15	18"			2215		(WHT-YEL)			
14	18"			2214		(WHT-ORN)			
13	36"			2213		(WHT-RED)			
12	36"			2212		(WHT-BRN)			
11	18"			2211		(WHT-BLK)			
10	27"			2210		(WHT)			
9	40"			2209		(GY)			
8	40"			2208		(VIO)			
7	18"			2207		(BLU)			
6	18"			2206		(GRN)			
5	40"			2205		(YEL)			
4	40"			2204		(ORN)			
3	19"			2203		(RED)			
2	18"			2202		(BRN)			
1	45"		SEE NOTE 11	60601052201		WIRE, ELECTRICAL (BLK) (AWG 22)			
	-011								

NEXT ASSY	USED ON
1016949	1016949

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOL ON: FRACTIONS ± — DECIMALS ± — ANGLES ± —
DO NOT SCALE THIS DRAWING
MATERIAL —
CONTRACT NAS9-497

KOLLSMAN INSTRUMENT CORPORATION
ELMHURST NEW YORK
KIC PN 02386910556
DRAWN J. MARGIOTTA DATE 11-22-65
CHECKED E.F. SCHROEDER 12-10-65
APPROVAL A. Fenner 12-10-65
APPROVAL
NASA APPROVAL
MIT APPROVAL

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

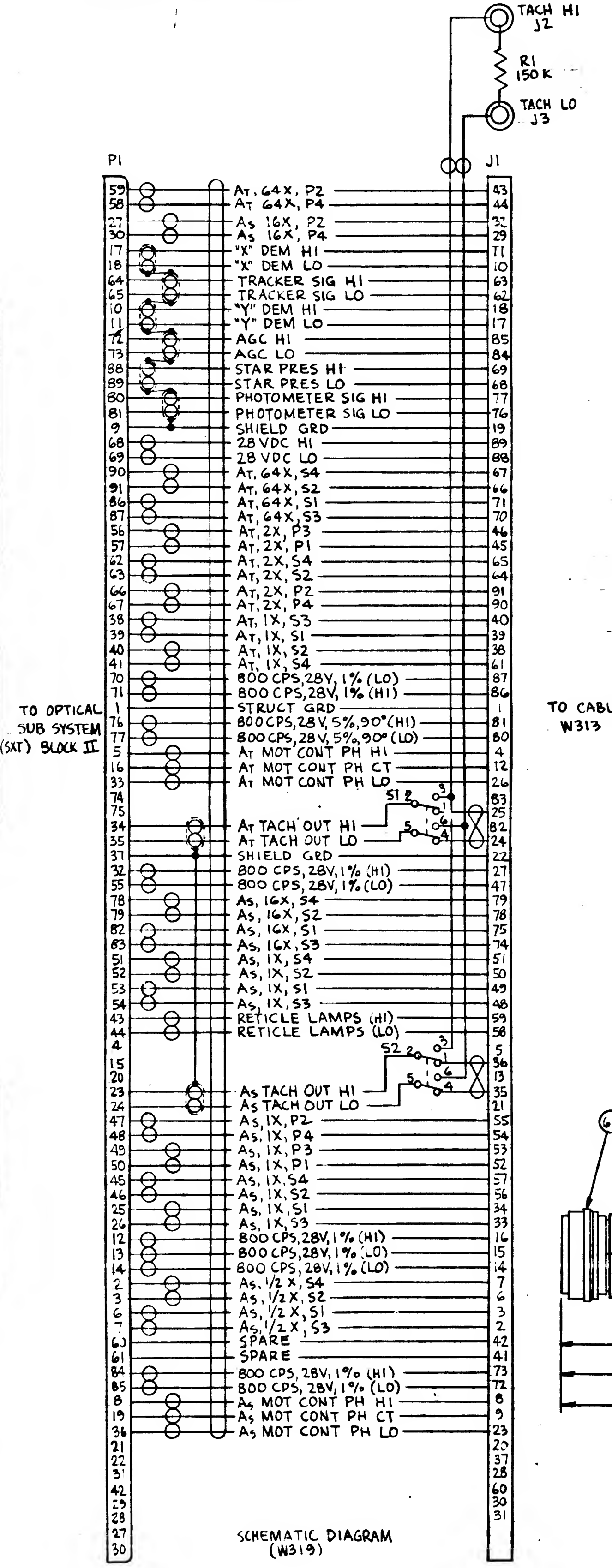
TITLE
CABLE ASSEMBLY, SPECIAL
PURPOSE, ELECTRICAL
BRANCHED (W319)

CODE IDENT NO 89944
SIZE E
NASA NUMBER 1022983
SCALE
WEIGHT CALC ACTUAL
SHEET OF

SYM	ZONE	REVISIONS DESCRIPTION	DATE	APPROVAL

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH MIL-D-70327
2. WIPE PER ND 1002032
3. SHRINK AND MARK PER ND 1002019
4. SHRINK AND IDENTIFY USING NASA PART NO., REVISION LETTER MANUFACTURER'S SYMBOL AND CABLE NO. (W319) PER ND1002019.
5. FOR SHIELDED WIRES, THE OUTER JACKET COLOR PROCEDES THE SLASH, FOLLOWED BY THE INNER CONDUCTOR INSULATION COLOR.
6. CRIMP PER ND 1002206.
7. CONDUCTORS SHALL HAVE FERRULES STAGGERED TO PREVENT OVERLAP WHENEVER TWO OR MORE ARE REQUIRED IN ONE BUNDLE
8. WIRE LENGTH TOLERANCES SHALL BE AS FOLLOWS:
   - LENGTHS UP TO 1" ± .062
   - LENGTHS OVER 1" TO 6" ± .125
   - LENGTHS OVER 6" TO 12" ± .250
   - LENGTHS OVER 12" TO 36" ± .500
9. SOLDER PER KPS-65.200.
10. MIL-I-631, TYPE F, FORM U, GRADE C, CLASS I, CATEGORY I, ID 1" DIA, COLOR - BLK
11. WIRE TO CONFORM WITH ND 1002181, TYPE I, CLASS I EXCEPT FOR SECTION 4 (QUALITY ASSURANCE PROVISION)
12. WIRE TO CONFORM WITH ND 1002181, TYPE II, CLASS 8 EXCEPT FOR SECTION 4 (QUALITY ASSURANCE PROVISION)
13. FOUR PAN HD. SHEET METAL SCREWS (NO. 6 x .188 LG. CRES) FURNISHED WITH ITEM 59.



SCHEMATIC DIAGRAM (W319)

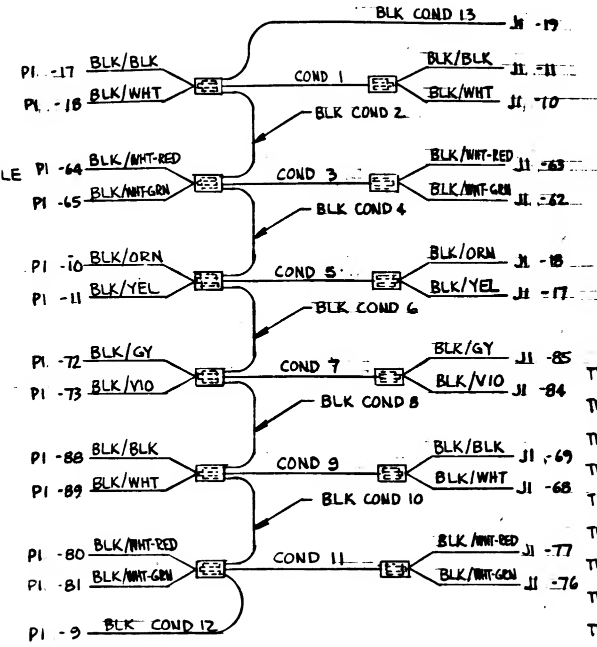


FIG. 1

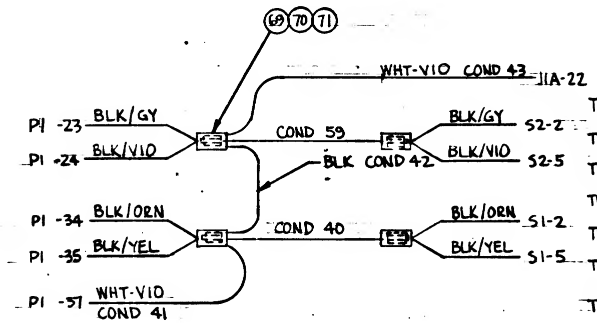
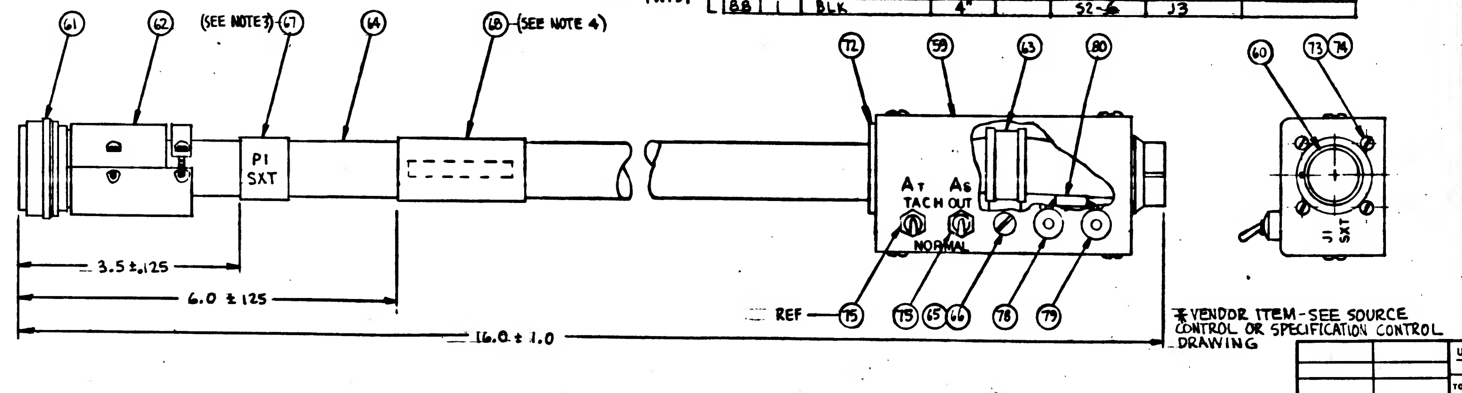


FIG. 2

	CONDUCTOR NO.	ITEM NO.	COLOR	LENGTH	ROUTE	FROM COMPONENT	TO COMPONENT	REFERENCE
	1	55	BLK/BLK BLK/WHT	16" 16"		P1-17 P1-18	J1-11 J1-10	SEE FIG. 1
	2	1	BLK	3"		SHLD COND 1	SHLD COND 3	
	3	56	BLK/WHT-RED BLK/WHT-GRN	16" 16"		P1-64 P1-65	J1-63 J1-62	
	4	1	BLK	3"		SHLD COND 3	SHLD COND 5	
	5	57	BLK/ORN BLK/YEL	16" 16"		P1-10 P1-11	J1-18 J1-17	
	6	1	BLK	3"		SHLD COND 5	SHLD COND 7	
	7	58	BLK/GY BLK/VIO	16" 16"		P1-72 P1-73	J1-85 J1-84	
	8	1	BLK	3"		SHLD COND 7	SHLD COND 9	
	9	55	BLK/BLK BLK/WHT	16" 16"		P1-88 P1-89	J1-69 J1-68	
	10	1	BLK	3"		SHLD COND 9	SHLD COND 11	
	11	56	BLK/WHT-RED BLK/WHT-GRN	16" 16"		P1-80 P1-81	J1-77 J1-76	
	12	1	BLK	3"		P1-9	SHLD COND 11	
	13	1	BLK	16"		SHLD COND 1	J1-19	SEE FIG. 1
TWIST	14	2	BRN	17.5		P1-68	89	
	15	3	RED			69	88	
TWIST	16	4	ORN			90	67	
	17	5	YEL			91	66	
TWIST	18	6	GRN			86	71	
	19	7	BLU			87	70	
TWIST	20	8	VIO			56	46	
	21	9	GY			57	45	
TWIST	22	10	WHT			62	65	
	23	11	WHT-BLK			63	64	
TWIST	24	12	WHT-BRN			66	91	
	25	13	WHT-RED			67	90	
TWIST	26	14	WHT-ORN			38	40	
	27	15	WHT-YEL			39	39	
TWIST	28	16	WHT-GRN			40	38	
	29	17	WHT-BLU			41	61	
TWIST	30	18	WHT-VIO			70	87	
	31	19	WHT-GY	17.5		71	86	
	32	20	WHT-BLK-BRN	16.0		1	1	
TWIST	33	21	WHT-BLK-RED	17.5		76	81	
	34	22	WHT-BLK-ORN			77	80	
TWIST	35	23	WHT-BLK-YEL			5	4	
	36	24	WHT-BLK-GRN			16	12	
	37	25	WHT-BLK-BLU			33	26	
TWIST	38	26	WHT-BLK-VIO			84	73	
	39	27	WHT-BLK-GY	17.5"		85	J1-72	
	40	57	BLK/ORN BLK/YEL	19" 19"		34 35	S1-2 S1-5	SEE FIG. 2
	41	18	WHT-VIO	3"		P1-37	SHLD COND 40	SEE FIG. 2
	42	1	BLK	3"		SHLD COND 40	SHLD COND 59	SEE FIG. 2
	43	18	WHT-VIO	16"		SHLD COND 59	J1-22	SEE FIG. 2
TWIST	44	28	WHT-BRN-RED	17.5"		P1-32	27	
	45	29	WHT-BRN-ORN			55	47	
TWIST	46	30	WHT-BRN-YEL			78	79	
	47	31	WHT-BRN-GRN			79	78	
TWIST	48	32	WHT-BRN-BLU			82	75	
	49	33	WHT-BRN-VIO			83	74	
TWIST	50	34	WHT-BRN-GY			51	51	
	51	35	WHT-RED-ORN			52	50	
TWIST	52	36	WHT-RED-YEL			53	49	
	53	37	WHT-RED-GRN			54	48	
TWIST	54	38	WHT-RED-BLU			43	59	
	55	39	WHT-RED-VIO			44	58	
TWIST	56	40	WHT-RED-GY			8	8	
	57	41	WHT-ORN-YEL			19	9	
	58	42	WHT-ORN-GRN	17.5"		36	J1-23	
	59	58	BLK/GY BLK/VIO	16" 16"		23 24	S2-2 S2-5	SEE FIG. 2
TWIST	60	43	WHT-ORN-BLU	17.5"		47	J1-55	
	61	44	WHT-ORN-VIO			48	54	
TWIST	62	45	WHT-ORN-GY			49	53	
	63	46	WHT-YEL-GRN			50	52	
TWIST	64	47	WHT-YEL-BLU			45	57	
	65	48	WHT-YEL-VIO			46	56	
TWIST	66	49	WHT-YEL-GY			25	34	
	67	50	WHT-GRN-BLU			26	33	
TWIST	68	51	WHT-GRN-VIO			12	16	
	69	52	WHT-GRN-GY			13	15	
	70	53	WHT-BLU-GY			14	14	
TWIST	71	54	WHT-VIO-GY			2	7	
	72	23	WHT-BLK-YEL			3	6	
TWIST	73	25	WHT-BLK-BLU			6	3	
	74	24	WHT-BLK-GRN	17.5"		7	2	
	75	40	WHT-RED-GY	16.0"		60	42	
	76	41	WHT-ORN-YEL	16.0"		61	41	
TWIST	77	12	WHT-BRN	17.5"		30	29	
	78	28	WHT-BRN-RED	17.5"		27	32	
TWIST	79	13	WHT-RED	17.5"		58	44	
	80	38	WHT-RED-BLU	17.5"		P1-59	-43	
TWIST	81	9	GY	21"		S2-1	-36	
	82	8	VIO	21"		S2-4	35	
TWIST	83	4	ORN	21"		S1-1	25	
	84	5	YEL	21"		S1-4	J1-24	
TWIST	85	10	WHT	4"		S1-3	S2-3	
	86	1	BLK	4"		S1-6	S2-6	
TWIST	87	10	WHT	4"		S2-3	J2	
	88	1	BLK	4"		S2-6	J3	



* VENDOR ITEM-SEE SOURCE CONTROL OR SPECIFICATION CONTROL DRAWING

ITEM NO.	QTY REQD	SYM	GOVERNMENT/NASA NO.	KOLLSMAN PART NO.	CODE IDENT	NOMENCLATURE OR DESCRIPTION	MATERIAL	SPECIFICATION	UNIT WT
81	REF		1022989			INTERCONNECTION DIAGRAM			
80	1		1001716-84	6818014408		RESISTOR, FIXED FILM INSULATED (R1)			
79	1		1001920-002			JACK, INSULATED BANANA			
78	1		1001920-001			JACK, INSULATED BANANA			
77									
76									
75	2		1001919			SWITCH, TOGGLE			
74	4		MS21042-04			NUT, SELF-LOCK			
73	4		MS35233-15	7445185015		SCREW, PAN HD			
72	1		1001921			GROMMET, RUBBER			
71	16	*	1001707-9	7409404 5024		FERRULE			
70	16	*	1001711-8	7409404 5003		FERRULE			
69	16	*	1001732-136	6002503 5009		INSULATION, SLEEVING			
68	1	*	1015865-453	6002503 5063		INSULATION, SLEEVING			
67	1	*	1015865-183	6002503 5063		INSULATION, SLEEVING			
66	1		MS21042-08			NUT, SELF-LOCK			
65	1		MS35233-45	7445518 5045		SCREW, PAN HD			
64	15"		SEE NOTE 10	6002505 0005		INSULATION SLEEVING			
63	1		MS21919-WDG14			CLAMP, CUSHION			
62	1	*	1001918-014			CLAMP, CABLE			
61	1	*	1001792-201			CONNECTOR, PLUG			
60	1	*	1001829-30			CONNECTOR, RECEPTACLE			
59	1	*	1022608			ENCLOSURE, ELECTRONIC			
58	34"		SEE NOTE 12	6052105 2245		CABLE, ELECTRICAL (BLK/GY, VIO) (AWG 22)			
57	37"		SEE NOTE 12	6052105 2231		CABLE, ELECTRICAL (BLK/ORN, YEL)			
56	34"		SEE NOTE 12	1700000 7484		CABLE, ELECTRICAL (BLK/WHT-RED, WHT-GRN)			
55	34"		SEE NOTE 12	6052105 2201		CABLE, ELECTRICAL (BLK/BLK, WHT)			
54	18"		SEE NOTE 11	6060105 2255		WIRE ELECTRICAL (WHT-VIO-GY)			
53	18"			2254		(WHT-BLU-GY)			
52	18"			2252		(WHT-GRN-GY)			
51	18"			2251		(WHT-GRN-VIO)			
50	18"			2250		(WHT-GRN-BLU)			
49	18"			2249		(WHT-YEL-GY)			
48	18"			2248		(WHT-YEL-VIO)			
47	18"			2247		(WHT-YEL-BLU)			
46	18"			2246		(WHT-YEL-GRN)			
45	18"			2245		(WHT-ORN-GY)			
44	18"			2244		(WHT-ORN-VIO)			
43	18"			2243		(WHT-ORN-BLU)			
42	18"			2242		(WHT-ORN-GRN)			
41	35"			2241		(WHT-ORN-YEL)			
40	35"			2240		(WHT-RED-GY)			
39	18"			2239		(WHT-RED-VIO)			
38	36"			2238		(WHT-RED-BLU)			
37	18"			2237		(WHT-RED-GRN)			
36	18"			2236		(WHT-RED-YEL)			
35	18"			2235		(WHT-RED-ORN)			
34	18"			2234		(WHT-BRN-GY)			
33	18"			2233		(WHT-BRN-VIO)			
32	18"			2232		(WHT-BRN-BLU)			
31	18"			2231		(WHT-BRN-GRN)			
[illegible]	18"			2230		(WHT-BRN-YEL)			
29	18"			2229		(WHT-BRN-ORN)			
28	42"			2228		(WHT-BRN-RED)			
27	18"			2227		(WHT-BLK-GY)			
26	18"			2226		(WHT-BLK-VIO)			
25	36"			2225		(WHT-BLK-BLU)			
24	36"			2224		(WHT-BLK-GRN)			
23	36"			2223		(WHT-BLK-YEL)			
22	18"			2222		(WHT-BLK-ORN)			
21	18"			2221		(WHT-BLK-RED)			
20	17"			2220		(WHT-BLK-BRN)			
19	18"			2219		(WHT-GY)			
18	35"			2218		(WHT-VIO)			
17	18"			2217		(WHT-BLU)			
16	18"			2216		(WHT-GRN)			
15	18"			2215		(WHT-YEL)			
14	18"			2214		(WHT-ORN)			
13	36"			2213		(WHT-RED)			
12	36"			2212		(WHT-BRN)			
11	18"			2211		(WHT-BLK)			
10	27"			2210		(WHT)			
9	40"			2209		(GY)			
8	40"			2208		(VIO)			
7	18"			2207		(BLU)			
6	18"			2206		(GRN)			
5	40"			2205		(YEL)			
4	40"			2204		(ORN)			
3	18"			2203		(RED)			
2	18"			2202		(BRN)			
1	45"		SEE NOTE 11	6060105 2201		WIRE, ELECTRICAL (BLK) (AWG 22)			
	-011	LIST OF PARTS AND MATERIALS							

NEXT ASSY	USED ON
1016949	1016949
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOL ON FRACTIONS ± — DECIMALS ± — ANGLES ± —
DO NOT SCALE THIS DRAWING
MATERIAL —
CONTRACT NAS 9-497

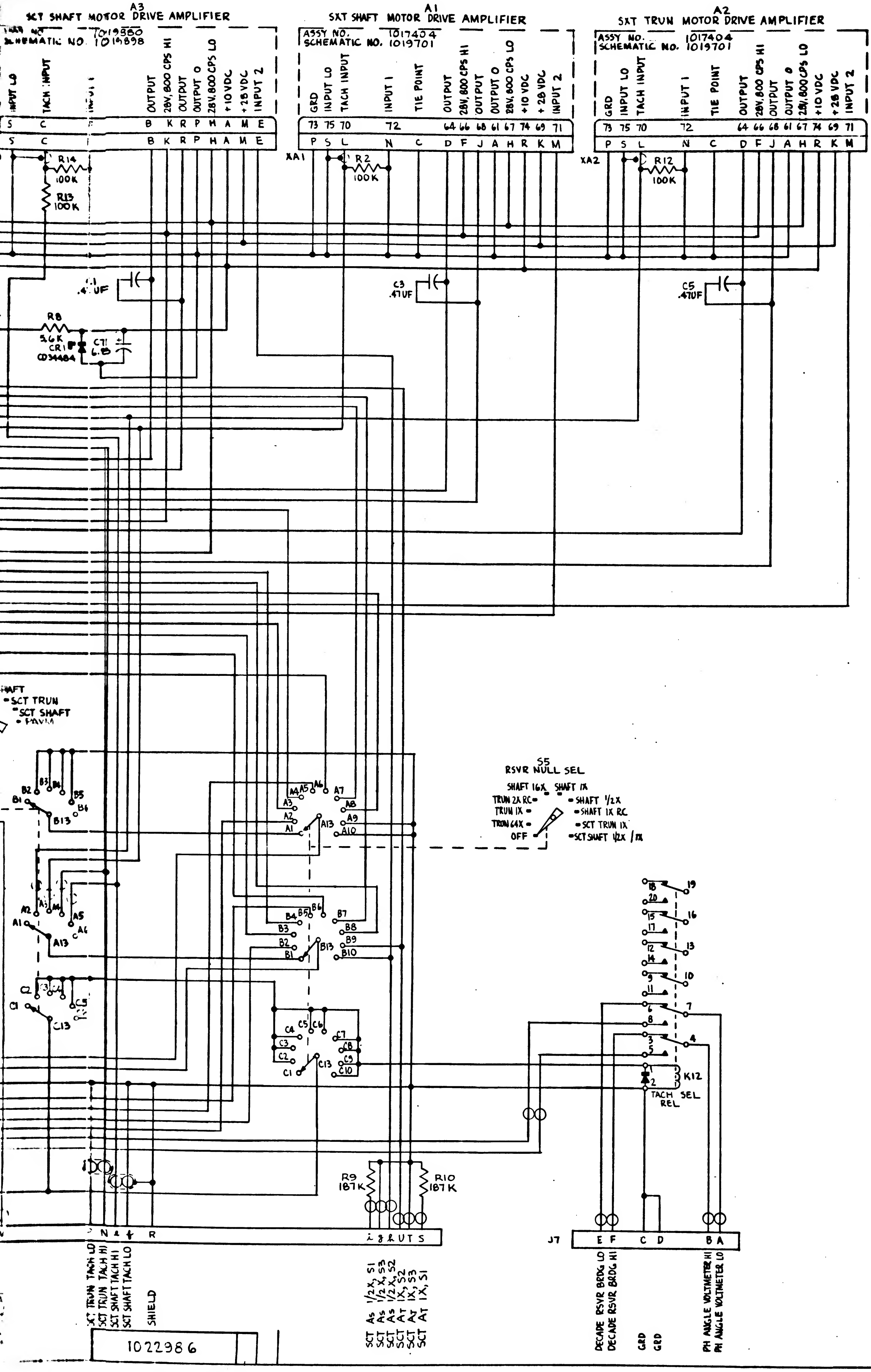
KOLLSMAN INSTRUMENT CORPORATION
ELMHURST NEW YORK
KIC PN 02386910556
DRAWN J. MARGIOTTA DATE 11-22-65
CHECKED E. F. SCHROEDER 12-10-65
APPROVAL R. Feman 12-10-65
APPROVAL
A. G. [illegible]
NASA APPROVAL
MIT APPROVAL

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

TITLE
CABLE ASSEMBLY, SPECIAL PURPOSE, ELECTRICAL, BRANCHED (W319)

CODE IDENT NO. 89944
SIZE E
NASA NUMBER 1022983
SCALE 1:1
WEIGHT CALC ACTUAL
SHEET 1 OF 1

MASTER



1022986

REF DESIG	ZONE	SYM	GOVERNMENT/ NASA NO.	KOLLSMAN PART NO.	DESCRIPTION	VALUE	TOL	RATING
A1			1017404	17020110170	AMPLIFIER ASSY			
A2			1017404	17020110170	AMPLIFIER ASSY			
A3			1019880		AMPLIFIER ASSY			
A4			1019880		AMPLIFIER ASSY			
C1			1001721-33		CAPACITOR	.47UF	±5%	200V
C2			1001721-33		CAPACITOR	.47UF	±5%	200V
C3			1001721-33		CAPACITOR	.47UF	±5%	200V
C5			1001721-33		CAPACITOR	.47UF	±5%	200V
C7			1001706-79		CAPACITOR	6.8UF	10%	35V
CB1			1006915-18		CIRCUIT BREAKER			
CR1			1001749-18		DIODE, ZENER			
DS1			1017463	68257001901	LAMP, NEON			
PS1			1017457	16020110620	POWER SUPPLY			
J1			MS3122E-22-55S		CONNECTOR			
J2			MS3122E-10-6S					
J3			MS3122E-14-19S					
J4			MS3102A-22-22P					
J5			MS3122E-14-5S					
J6			MS3122E-20-41S					
J7			MS3122E-10-6SW					
J8			MS3122E-14-19SW					
J9			MS3122E-12-10S		CONNECTOR			
K3			1017466	16020110680	RELAY W/INT DIODE			
K4								
K5								
K6								
K7								
K8								
K9			1017466	16020110680	RELAY W/INT DIODE			
K12			1017466	16020110680	RELAY W/INT DIODE			
K13								
K14								
K15								
K16								
K17								
K18								
K19								
K20								
K21								
K22								
K23								
K24								
K25								
K26			1017466	16020110680	RELAY W/INT DIODE			
K27			1017466	16020110680	RELAY W/INT DIODE			
K28			1017466	16020110680	RELAY W/INT DIODE			
M1			1017460-5	68421001105	VOLTMETER, MULTIRANGE			
M2			1019716	17020110380	COUNTER			
M3			1019716	17020110380	COUNTER			
M4			1006927		INDICATOR, TIME ELAPSE			
M5			1019907		COUNTER			
R2			1001705-636		RESISTOR	100K	±1%	1/8W
R3			1001705-636			100K	±1%	1/8W
R4			1017460-2	68421001102		8K	±1%	1/2W
R5			RW57G-R50			.5	±5%	5W
R6			1016003-20			1		25W
R7			RW30-Y-2R0	68180154620		2		11W
R8			1001716-50			5.6K	±2%	1/2W
R9			1001705-688			187K	±1%	1/8W
R10			1001705-688			187K	±1%	1/8W
R12			1001705-636			100K	±1%	1/8W
R13			1001705-636			100K	±1%	1/8W
R14			1001705-636			100K	±1%	1/8W
R15			1001705-636			100K	±1%	1/8W
R16			1001705-636		RESISTOR	100K	±1%	1/8W
S1			MS25307-23		SWITCH			
S2			1001762-2					
S3			1001762-1					
S5			1001762-9					
S6			1001762-1					
S7			1001762-1					
S8			1001762-5					
S9			1001762-9					
S11			MS25307-23					
S12			MS25307-23		SWITCH			
T1			1017484		TRANSFORMER, VAR			
T2			1017462		TRANSFORMER, STEP DN			
T3			MS90018-2		TRANSFORMER			
XA1			1015957-136		CONNECTOR			
XA2			1015957-136		CONNECTOR			
XA3			1001761-2		CONNECTOR			
XA4			1001761-2		CONNECTOR			
XDS1			1017465		LAMP, INDICATOR			

REVISIONS

SYM	ZONE	DESCRIPTION	DATE	APPROVAL
REV	-	CLASS A RELEASE PER TDRR 25646		

3 H

REFERENCE DRAWING
1. WIRING DIAGRAM 1022987
2. CONTROL PANEL ASSY 1017389-021

ITEM	QTY REQD	SYM	GOVERNMENT / NASA NO.	KOLLSMAN PART NO.	CODE IDENT	NOMENCLATURE OR DESCRIPTION	MATERIAL	SPECIFICATION	UNIT WT

LIST OF PARTS AND MATERIALS

NEXT ASSY	USED ON
1017389	1016949

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOL ON FRACTIONS ± — DECIMALS ± — ANGLES ± —
DO NOT SCALE THIS DRAWING
MATERIAL —
CONTRACT NAS9-497

KOLLSMAN INSTRUMENT CORPORATION
ELMHURST NEW YORK
KIC PN 02386910562
DRAWN J. MARGIOTTA DATE 12-2-65
CHECKED E. J. SCHROEDER 12-10-65
APPROVAL 12-10-65
APPROVAL R. Fe 12-10-65
NASA APPROVAL R. C. METZGER
MIT APPROVAL

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

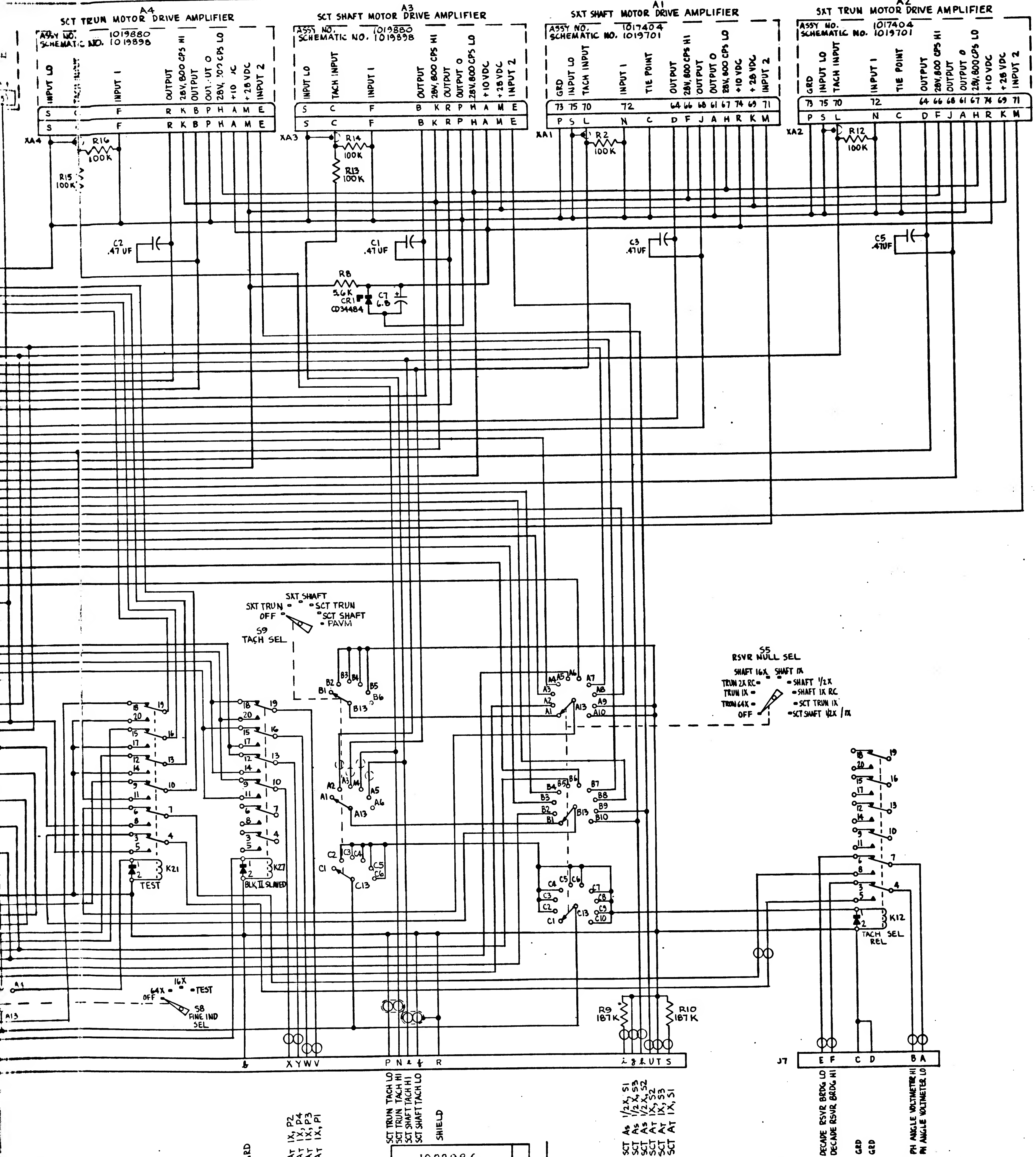
TITLE
CONTROL PANEL, FUNCTIONAL TESTER SCHEMATIC DIAGRAM

CODE IDENT NO. 89944
SIZE R
NASA NUMBER 1022986
SCALE NONE
WEIGHT CALC ACTUAL
SHEET 1 OF 1

AD-1520

1022986

MASTER



REF DESIG	ZONE	SYM	GOVERNMENT/ NASA NO.	KOLLSMAN PART NO.	DESCRIPTION	VALUE	TOL	RATING
A1			1017404	17020110170	AMPLIFIER ASSY			
A2			1017404	17020110170	AMPLIFIER ASSY			
A3			1019880		AMPLIFIER ASSY			
A4			1019880		AMPLIFIER ASSY			
C1			1001721-33		CAPACITOR	.47UF	± 5%	200V
C2			1001721-33		CAPACITOR	.47UF	± 5%	200V
C3			1001721-33		CAPACITOR	.47UF	± 5%	200V
C5			1001721-33		CAPACITOR	.47UF	± 5%	200V
C7			1001706-79		CAPACITOR	6.8UF	10%	35V
CB1			1006915-18		CIRCUIT BREAKER			
CR1			1001749-18		DIODE, ZENER			
DS1			1017463	68257001901	LAMP, NEON			
PS1			1017457	16020110620	POWER SUPPLY			
J1			MS3122E-22-55S		CONNECTOR			
J2			MS3122E-10-6S					
J3			MS3122E-14-19S					
J4			MS3102A-22-22P					
J5			MS3122E-14-5S					
J6			MS3122E-20-41S					
J7			MS3122E-10-6SW					
J8			MS3122E-14-19SW					
J9			MS3122E-12-10S		CONNECTOR			
K3			1017466	16020110680	RELAY W/INT DIODE			
K4								
K5								
K6								
K7								
K8								
K9			1017466	16020110680	RELAY W/INT DIODE			
K12			1017466	16020110680	RELAY W/INT DIODE			
K13								
K14								
K15								
K16								
K17								
K18								
K19								
K20								
K21								
K22								
K23								
K24								
K25								
K26			1017466	16020110680	RELAY W/INT DIODE			
K27			1017466	16020110680	RELAY W/INT DIODE			
K28			1017466	16020110680	RELAY W/INT DIODE			
M1			1017460-5	68421001105	VOLTMETER, MULTIRANGE			
M2			1019716	17020110380	COUNTER			
M3			1019716	17020110380	COUNTER			
M4			1006927		INDICATOR, TIME ELAPSE			
M5			1019907		COUNTER			
R2			1001705-636		RESISTOR	100K	± 1%	1/8W
R3			1001705-636			100K	± 1%	1/8W
R4			1017460-2	68421001102		8K	± 1%	1/2W
R5			RW57G-R50			.5	± 5%	5W
R6			1016003-20			1		25W
R7			RW30-Y-2R0	68180154620		2		11W
R8			1001716-50			5.6K	± 2%	1/2W
R9			1001705-688			187K	± 1%	1/8W
R10			1001705-688			187K	± 1%	1/8W
R12			1001705-636			100K	± 1%	1/8W
R13			1001705-636			100K	± 1%	1/8W
R14			1001705-636			100K	± 1%	1/8W
R15			1001705-636			100K	± 1%	1/8W
R16			1001705-636		RESISTOR	100K	± 1%	1/8W
S1			MS25307-23		SWITCH			
S2			1001762-2					
S3			1001762-1					
S5			1001762-9					
S6			1001762-1					
S7			1001762-1					
S8			1001762-5					
S9			1001762-9					
S11			MS25307-23					
S12			MS25307-23		SWITCH			
T1			1017484		TRANSFORMER, VAR			
T2			1017462		TRANSFORMER, STEP DN			
T3			MS90018-2		TRANSFORMER			
XA1			1015957-136		CONNECTOR			
XA2			1015957-136		CONNECTOR			
XA3			1001761-2		CONNECTOR			
XA4			1001761-2		CONNECTOR			
XDS1			1017465		LAMP, INDICATOR			

REFERENCE DRAWING
1. WIRING DIAGRAM 102291. 7
2. CONTROL PANEL ASSY 017389-021

ITEM	QTY REQD	SYM	GOVERNMENT / NASA NO	KOLLSMAN PART NO	COD IDEN	NOMENCLATURE OR DESCRIPTION

LIST OF PARTS AND MATERIALS

NEXT ASSY	USED ON
1017389	1016949

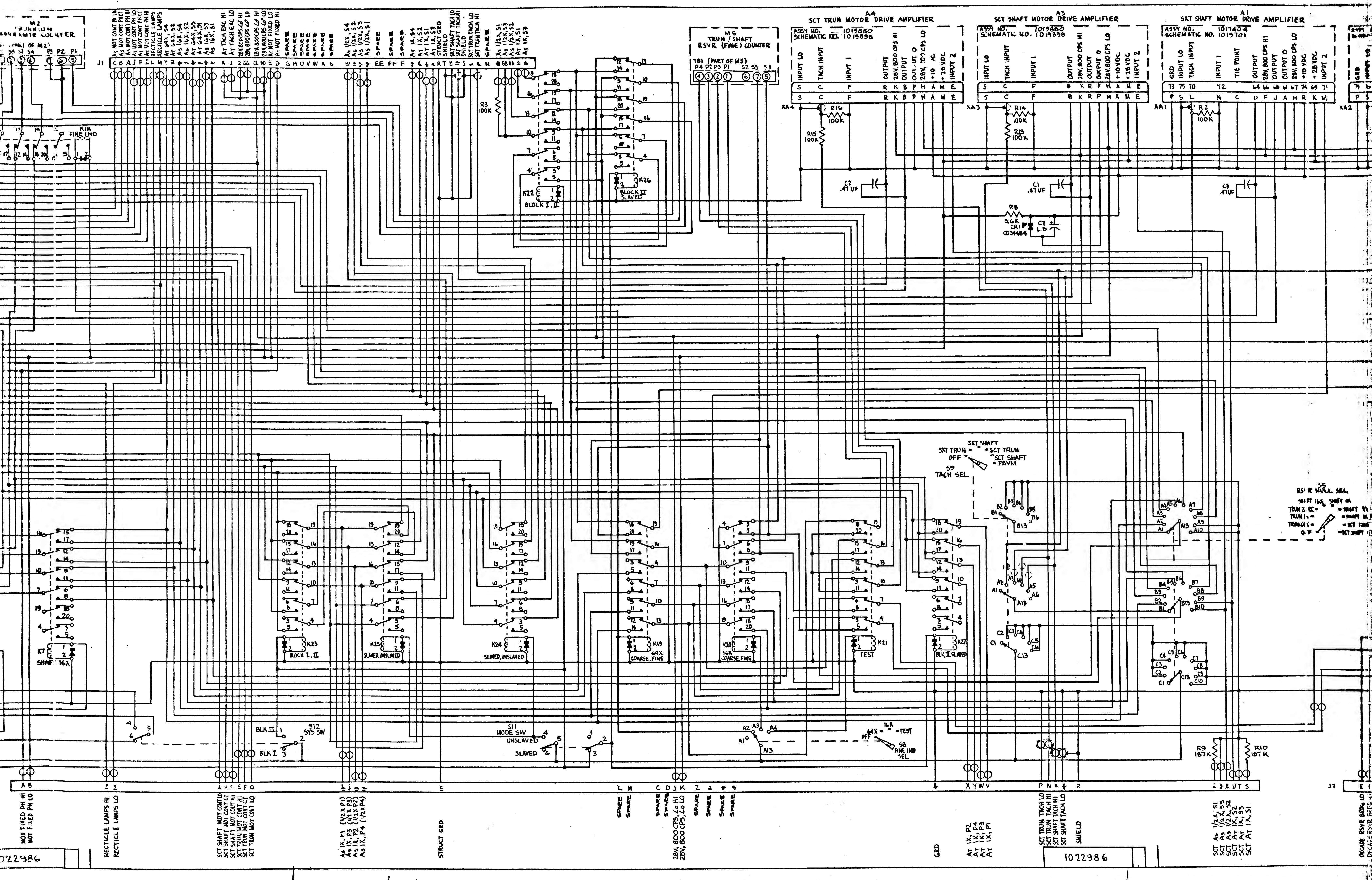
APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOL ON FRACTIONS ± — DECIMALS ± — ANGLES ± —
DO NOT SCALE THIS DRAWING
MATERIAL —
CONTRACT NAS9-497

KOLLSMAN INSTRUMENT CORPORATION
ELMHURST NEW YORK
KIC PN 02386910
DRAWN MARMOTTA
CHECKED
APPROVAL
APPROVAL
NASA APPROVAL A. C. METZGER
MIT APPROVAL

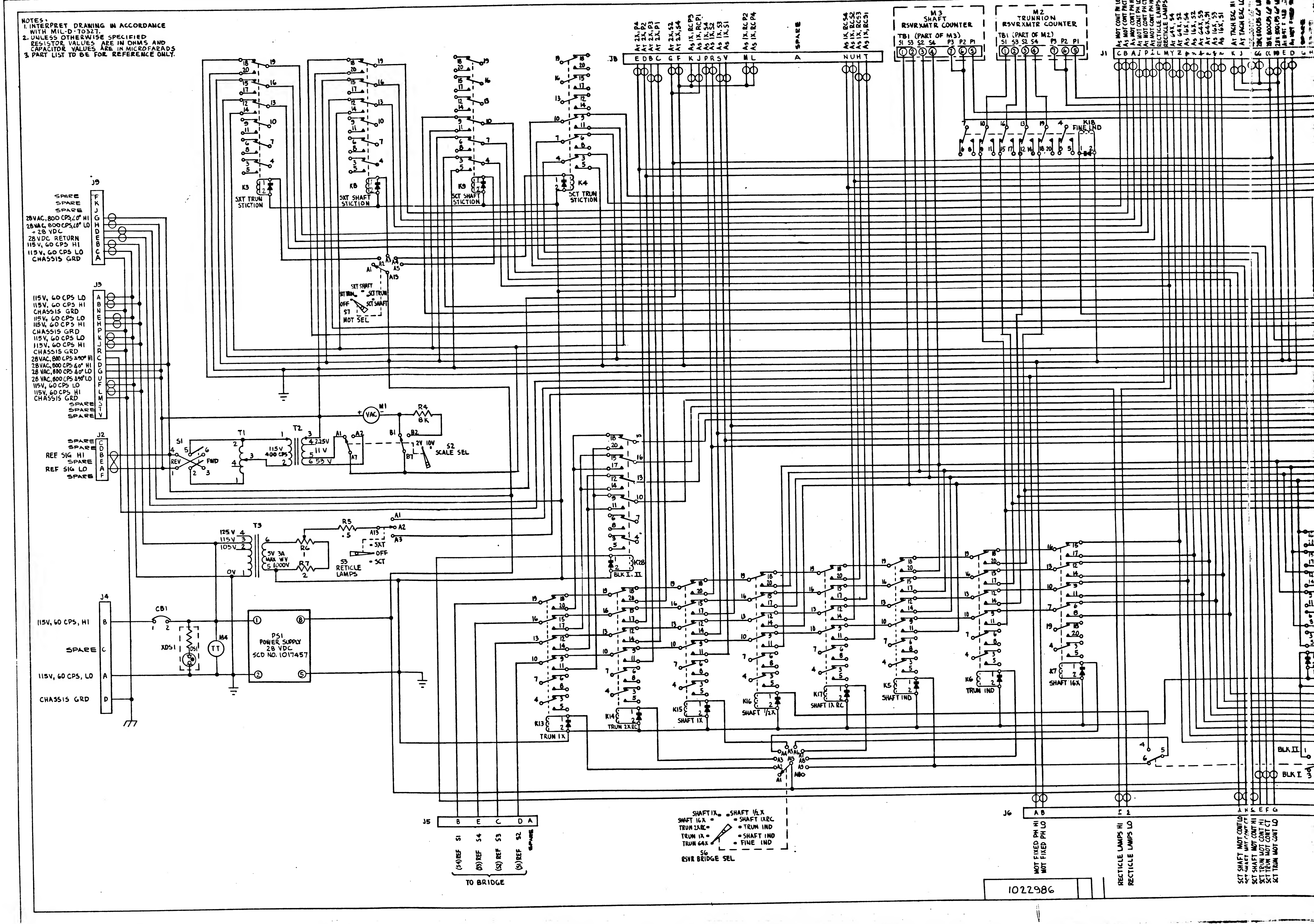
TITLE CONTROL TESTER
CODE IDENT NO. 89944
SIZE R
SCALE NONE

MASTER


M2
TRUNNION
ANTENNA COUNTER
(PART OF M2)
S3 S2 S4
P3 P2 P1
J1
As MOT CONT PH LO
As MOT CONT PH CT
As MOT CONT PH HI
At MOT CONT PH LO
At MOT CONT PH CT
At MOT CONT PH HI
RECTICLE LAMPS
RECTICLE LAMPS
At 64X, S4
At 64X, S2
As 16X, S4
As 16X, S2
At 64X, S3
At 64X, S1
As 16X, S3
As 16X, S1
At TACH EXC HI
At TACH EXC LO
28V, 800CPS Lo HI
28V, 800CPS Lo LO
28V, 800CPS Lo HI
28V, 800CPS Lo LO
At MOT FIXED LO
At MOT FIXED HI
SPARE
As 1/2X, S4
As 1/2X, S2
As 1/2X, S3
As 1/2X, S1
At 1X, S4
At 1X, S2
At 1X, S1
At 1X, S3
STRUCT GRD
SHIELD
SXT SHAFT TACH LO
SXT SHAFT TACH HI
SHIELD
SXT TRUN TACH LO
SXT TRUN TACH HI
As 1/2X, S1
As 1/2X, S3
As 1/2X, S2
At 1X, S1
At 1X, S3
C B A j P i L M Y Z K J GG CC DD E D G H U V W X t EE FF F R T S N HH BB AA
K18
FINE IND
R3
100K
K22
BLOCK I, II
K26
BLOCK II
SLAVED
M5
TRUN / SHAFT
RSVR (FINE) COUNTER
TB1 (PART OF M5)
P4 P2 P3 P1 S2 S3 S1
A4
SCT TRUN MOTOR DRIVE AMPLIFIER
ASSY NO. 1019880
SCHEMATIC NO. 1019898
INPUT LO
TACH INPUT
INPUT I
OUTPUT
28V, 800 CPS HI
OUTPUT
OUTPUT O
28V, 800 CPS LO
+10 VDC
+28 VDC
INPUT 2
S C F R K B P H A M E
XA4
R16
100K
R15
100K
C2
.47 UF
A3
SCT SHAFT MOTOR DRIVE AMPLIFIER
ASSY NO. 1019880
SCHEMATIC NO. 1019898
S C F B K R P H A M E
XA3
R14
100K
R13
100K
C1
.47 UF
R8
5.6K
CR1
CD34484
C7
6.8
A1
SXT SHAFT MOTOR DRIVE AMPLIFIER
ASSY NO. 1017404
SCHEMATIC NO. 1019701
GRD
INPUT LO
TACH INPUT
INPUT I
TIE POINT
OUTPUT
28V, 800 CPS HI
OUTPUT
OUTPUT O
28V, 800 CPS LO
+10 VDC
+28 VDC
INPUT 2
73 75 70 72 64 66 68 61 67 74 69 71
P S L N C D F J A H R K M
XA1
R2
100K
XA2
SXT TRUN
SXT SHAFT
SCT TRUN
SCT SHAFT
PAVM
OFF
S9
TACH SEL
S5
RSVR NULL SEL
SHAFT 16X
SHAFT 1X
TRUN 2) RC
TRUN 1
TRUN 64X
OFF
K7
SHAFT 16X
K23
BLOCK I, II
K25
SLAVED, UNSLAVED
K24
SLAVED, UNSLAVED
K19
64X
COARSE, FINE
K20
16X
COARSE, FINE
K21
TEST
K27
BLK II SLAVED
BLK II
BLK I
S12
SYS SW
S11
MODE SW
UNSLAVED
SLAVED
64X
16X
TEST
OFF
S8
FINE IND
SEL
R9
187K
R10
187K
J7
A B
MOT FIXED PH HI
MOT FIXED PH LO
RECTICLE LAMPS HI
RECTICLE LAMPS LO
SCT SHAFT MOT CONT LO
SCT SHAFT MOT CONT CT
SCT SHAFT MOT CONT HI
SCT TRUN MOT CONT HI
SCT TRUN MOT CONT CT
SCT TRUN MOT CONT LO
As 1X, P1 (1/2X P1)
As 1X, P3 (1/2X P3)
As 1X, P2 (1/2X P2)
As 1X, P4 (1/2X P4)
STRUCT GRD
L M
SPARE
C D J K Z
28V, 800CPS, Lo HI
28V, 800CPS, Lo LO
GRD
X Y W V
AT 1X, P2
AT 1X, P4
AT 1X, P3
AT 1X, P1
P N R
SCT TRUN TACH LO
SCT TRUN TACH HI
SCT SHAFT TACH HI
SCT SHAFT TACH LO
SHIELD
U T S
SCT As 1/2X, S1
SCT As 1/2X, S3
SCT As 1/2X, S2
SCT At 1X, S2
SCT At 1X, S3
SCT At 1X, S1
DECADE RSVR BRDG LO
DECADE RSVR BRDG HI
1022986
1022986

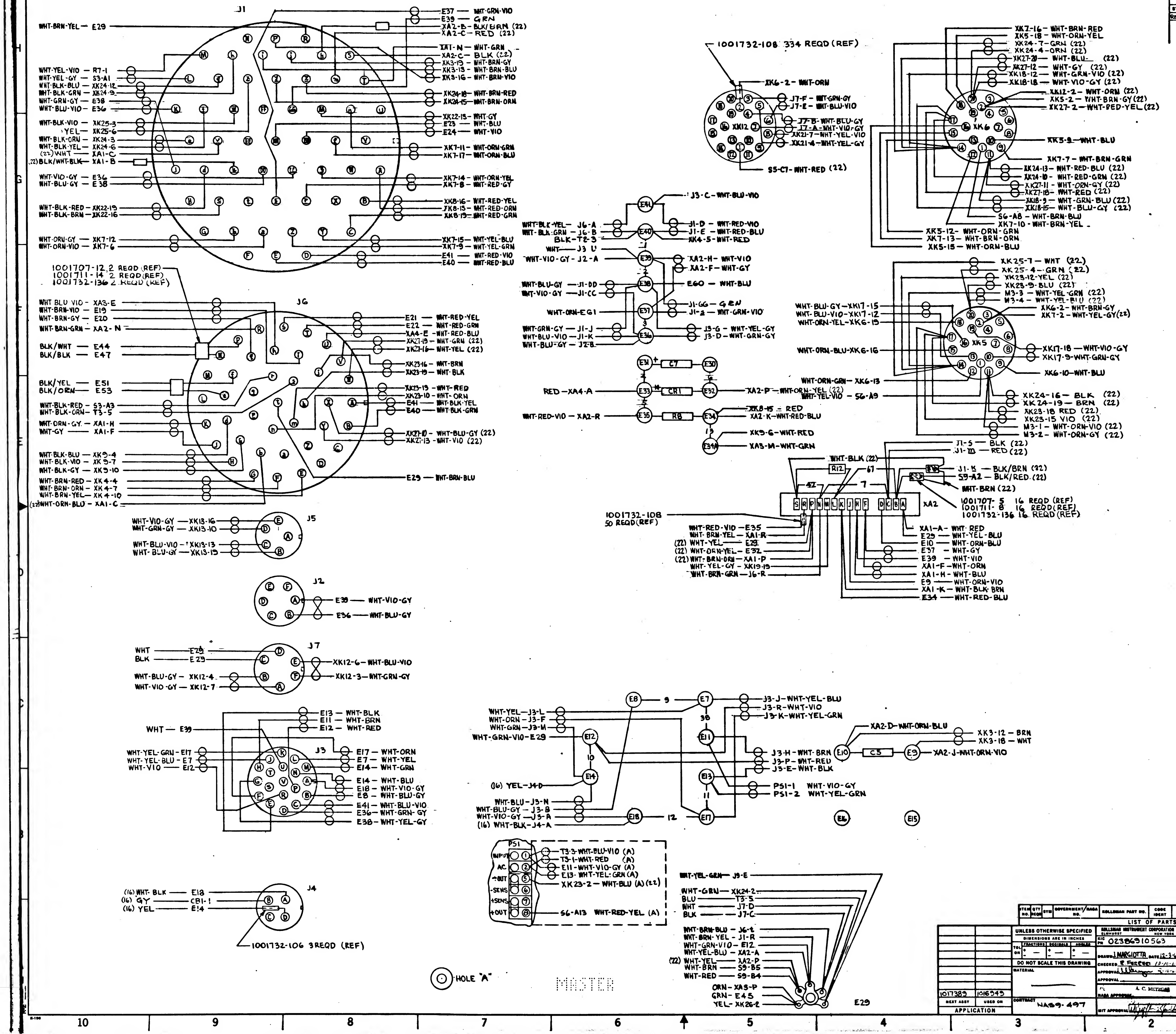
E2

NOTES:
1. INTERPRET DRAWING IN ACCORDANCE WITH MIL-D-70327.
2. UNLESS OTHERWISE SPECIFIED RESISTOR VALUES ARE IN OHMS AND CAPACITOR VALUES ARE IN MICROFARADS
3. PART LIST TO BE FOR REFERENCE ONLY.



1022986

REVISIONS				
SYM	ZONE	DESCRIPTION	DATE	APPROVAL
REV	—	CLASS A RELEASE PER TDRR		



ITEM NO.	QTY REQD	SYM	GOVERNMENT/NASA NO.	KOLLSMAN PART NO.	CODE IDENT	NOMENCLATURE OR DESCRIPTION	MATERIAL	SPECIFICATION	UNIT WT

LIST OF PARTS AND MATERIALS

NEXT ASSY	USED ON
1017389	1016949

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOL ON FRACTIONS ± — DECIMALS ± — ANGLES ± —
DO NOT SCALE THIS DRAWING
MATERIAL —
CONTRACT NAS9-497

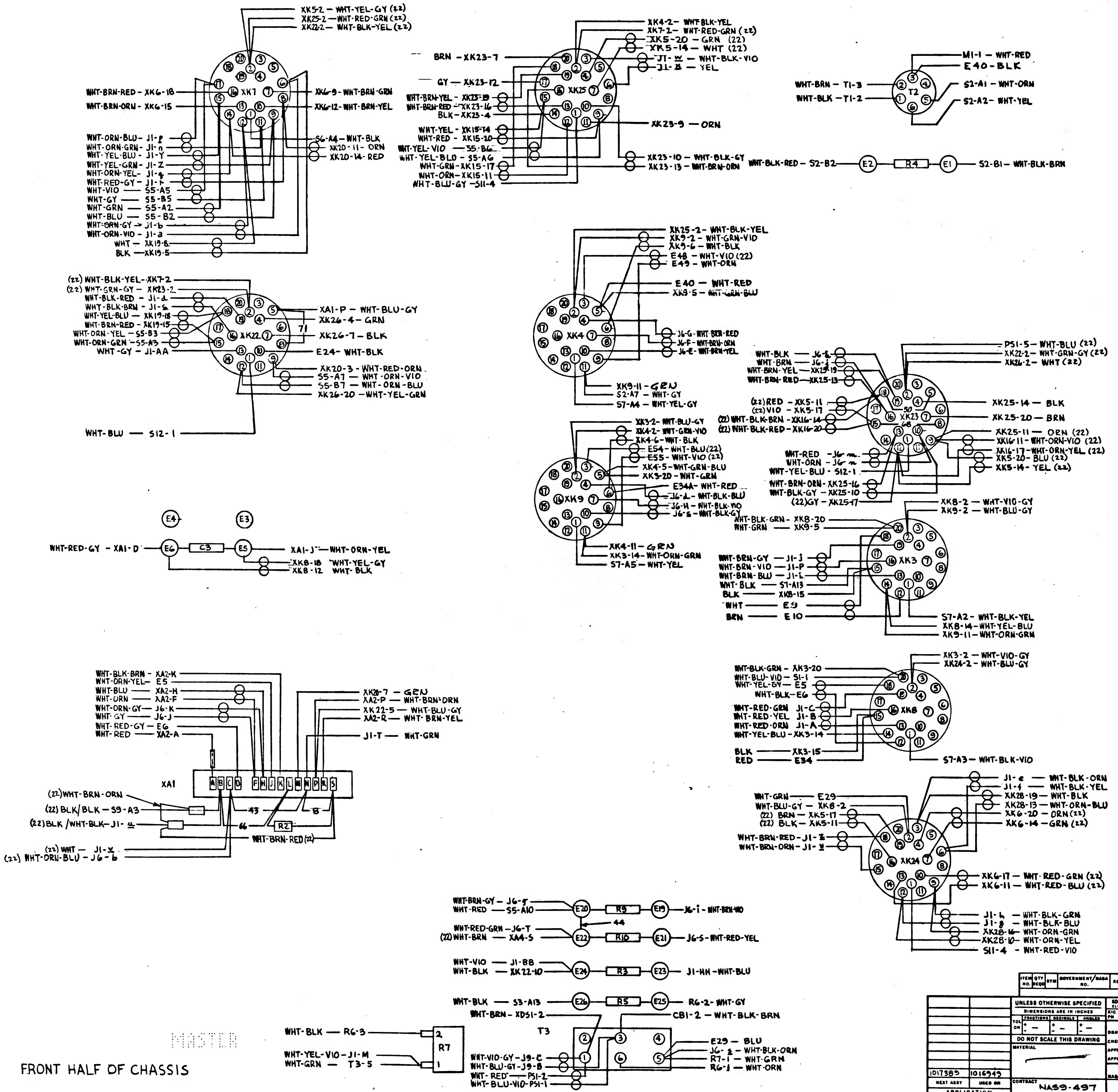
KOLLSMAN INSTRUMENT CORPORATION
ELMHURST NEW YORK
KIC PN 02386910563
DRAWN J MARGIOTTA DATE 12-3-65
CHECKED R. FERCERI 12-10-65
APPROVAL 12-10-65
APPROVAL
P/L A. C. METZGAR
NASA APPROVAL
MIT APPROVAL

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

TITLE
CONTROL PANEL
WIRING DIAGRAM

CODE IDENT NO. 8994A
SIZE E
NASA NUMBER 1022987
SCALE NONE
WEIGHT
CALC ACTUAL
SHEET 1 OF 4

REVISIONS				
SYM	ZONE	DESCRIPTION	DATE	APPROVAL
REV	—	CLASS A RELEASE PER TDRR 25646		



MASTER

FRONT HALF OF CHASSIS

ITEM NO.	QTY REQD	SYM	GOVERNMENT/NASA NO.	KOLLSMAN PART NO.	CODE IDENT	NOMENCLATURE OR DESCRIPTION	MATERIAL	SPECIFICATION	UNIT WT

LIST OF PARTS AND MATERIALS

1017389	1016949
NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOL ON FRACTIONS ± — DECIMALS ± — ANGLES ± —
DO NOT SCALE THIS DRAWING
MATERIAL —
CONTRACT NAS9-497

KOLLSMAN INSTRUMENT CORPORATION
ELMHURST NEW YORK
KIC PN 02386910563
DRAWN L MARGIOTTA DATE 12-3-65
CHECKED R. FERRERI 12-10-65
APPROVAL 12-10-65
APPROVAL
NASA APPROVAL A. C. METZGER
MIT APPROVAL

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

TITLE
CONTROL PANEL
WIRING DIAGRAM

CODE IDENT NO 83944
SIZE E
NASA NUMBER 1022987
SCALE NONE
WEIGHT CALC ACTUAL
SHEET 2 OF 4

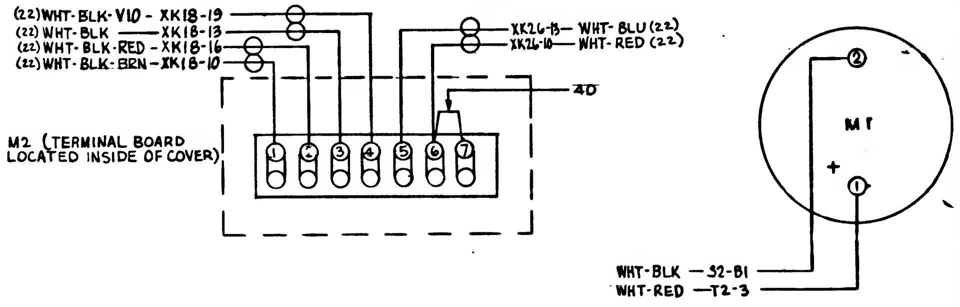
NOTES:
1. INTERPRET DRAWING IN ACCORDANCE WITH MIL-D-70327
2. FOR SHIELDED WIRES, THE OUTER JACKET COLOR PRECEDES THE SLASH, FOLLOWED BY THE INNER CONDUCTOR INSULATION COLOR.
3. ▭ SYMBOL INDICATES INNER AND OUTER FERRULES AND SLEEVING
4. SOLDER PER ND 1002071.
5. ADD LUGS PER ND 1002206.
6. WIRE PER ND 1002032.
7. ALL WIRE TO BE NO. 20 AWG UNLESS OTHERWISE INDICATED.

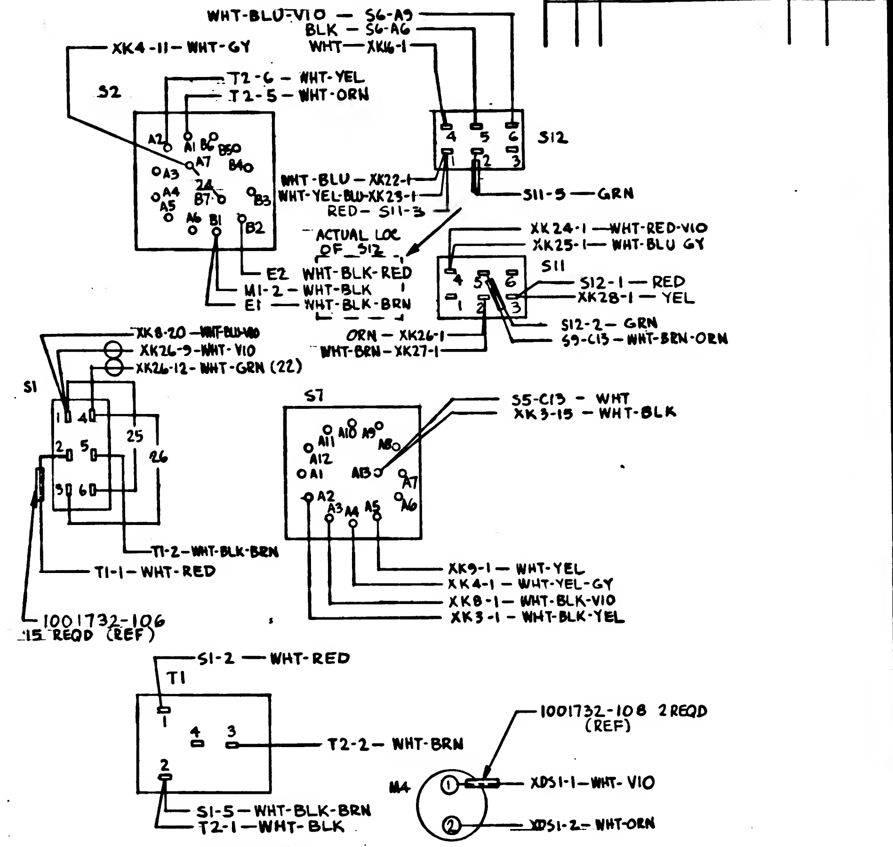
COND NO.	PART NO. REF	AWG SIZE	COLOR	LENGTH ±.125	FROM COMPONENT	TO COMPONENT	SLEEVING REF
1	MIL-W-3861 TYPES	20	BARE WIRE	2.0	E39	E40	
2				2.0	E38	E39	
3				2.0	E36	E37	
4				2.0	E31	E33	
5				2.0	E33	E35	
6		20		2.0	E30	E32	
7		22		4.0	XA2-C	XA2-N	1001710-20
8		20		2.0	XA1-S	XA1-N	1001710-20
9				2.0	E7	E8	
10				2.0	E12	E14	
11				2.0	E13	E17	
12				2.0	E17	E18	
13		20		2.0	E34	E34A	
14	MIL-W-3861 TYPES	22	BARE WIRE	1.0	S9-C5	S9-C6	
15							
16							
17							
18							
19							
20							
21							
22							

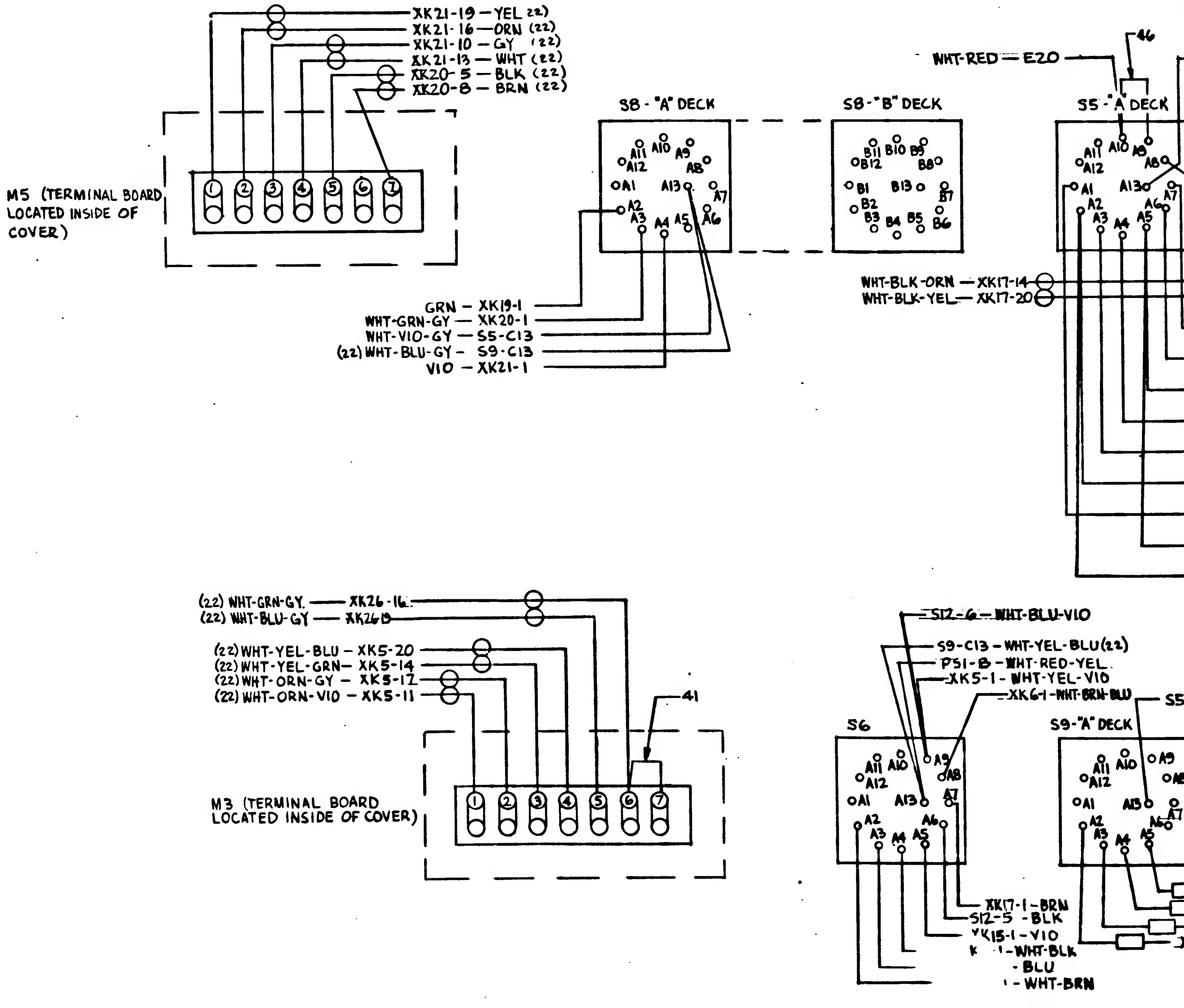
COND NO.	PART NO. REF	AWG SIZE	COLOR	LENGTH ±.125	FROM COMPONENT	TO COMPONENT	SLEEVING REF
23	MIL-W-3861 TYPES	20	BARE WIRE	2.0	XK8-15	XK8-18	1001710-20
24				3.0	S2-B7	S2-A7	
25				2.0	S1-1	S1-6	1001710-20
26				2.0	S1-4	S1-3	1001710-20
27				1.0	S5-C2	S5-C3	
28				1.0	S5-C3	S5-C4	
29				1.0	S5-C4	S5-C5	
30				1.0	S5-C5	S5-C6	
31				1.0	S5-C6	S5-C7	
32							
33				1.0	S9-C2	S9-C3	
34				1.0	S9-C3	S9-C4	
35				1.0	S9-C4	S9-C5	
36				1.0	S9-B2	S9-B4	1001710-20
37		20		1.0	S9-B3	S9-B5	1001710-20
38		20		2.0	E7	E11	
39	MIL-W-3861 TYPES	22	BARE WIRE	2.0	XK27-9	XK27-20	1001710-22
40	MIL-W-16878/1B	22	WHT-RED	3.0	M2-6	M2-7	
41	MIL-W-16878/1B	22	WHT-RED	3.0	M3-6	M3-7	
42	MIL-W-3861 TYPES	20	BARE WIRE	2.0	XA2-N	XA2-S	1001710-20
43		20		4.0	XA1-C	XA1-N	1001710-20
44		20		2.0	E20	E22	
45		22		2.0	XK28-9	XK28-20	1001710-22
46		20		1.0	S5-A10	S5-A9	
47				1.0	S5-C7	S5-C8	
48				1.0	S5-C8	S5-C9	
49		20		1.0	S5-C9	S5-C10	
50		22		2.0	XK23-5	XK23-18	1001710-20
51		22		2.0	XA4-S	XA4-P	1001710-20
52				3.0	XA4-P	XA4-F	1001710-20
53				2.0	XA3-S	XA3-P	1001710-20
54				3.0	XA3-P	XA3-F	1001710-20
55				2.0	E50	E52	
56				2.0	E57	E59	
57				2.0	E59	E61	
58				2.0	E56	E58	
59				2.0	E58	E60	
60		22		2.0	E43	E46	
61		20		2.0	XK26-9	XK26-15	1001710-20
62				2.0	XK26-12	XK26-18	1001710-20
63				2.0	XK21-14	XK21-17	1001710-20
64				2.0	XK21-17	XK21-20	1001710-20
65				2.0	XK21-20	XK21-2	
66				3.0	XA1-B	XA1-L	1001710-20
67		20		3.0	XA2-B	XA2-L	1001710-20
68		22		2.0	XK23-8	XK23-15	1001710-20
69		22		2.0	XK26-3	XK26-20	1001710-20
70		22		2.0	XK26-6	XK26-14	1001710-20
71		22		2.0	XK22-5	XK22-8	1001710-20
72				2.0	XK27-11	XK27-15	
73				2.0	XK27-12	XK27-17	
74				2.0	XK27-14	XK27-18	
75				2.0	XK28-11	XK28-12	
76				2.0	XK28-14	XK28-15	
77	MIL-W-3861 TYPES	22	BARE WIRE	2.0	XK28-17	XK28-18	1001710-20

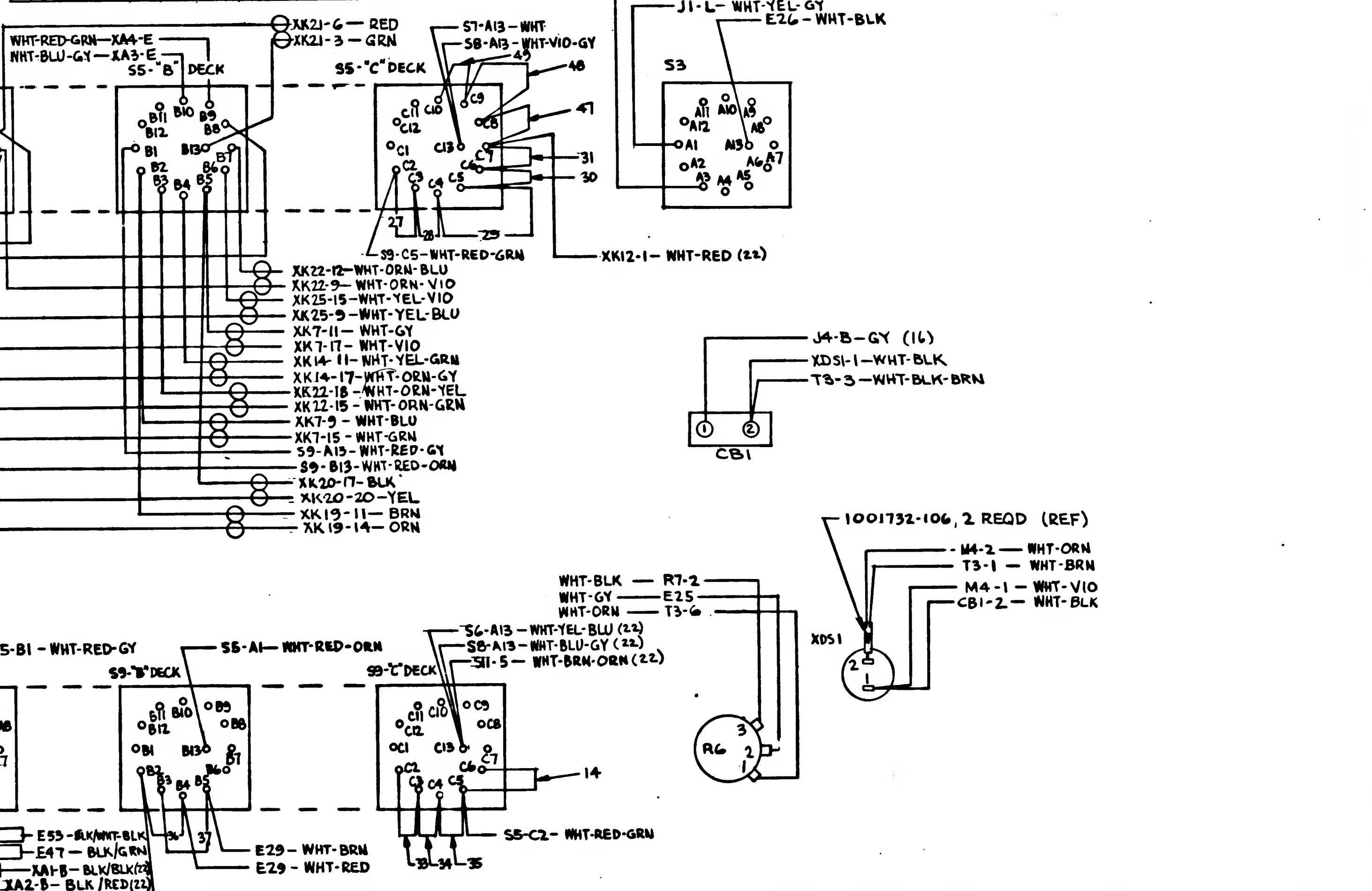
REVISIONS

SYM	ZONE	DESCRIPTION	DATE	APPROVAL
REV	—	CLASS A RELEASE PER TDRR 25646		


(22) WHT-BLK-VIO - XK18-19
(22) WHT-BLK - XK18-13
(22) WHT-BLK-RED - XK18-16
(22) WHT-BLK-BRN - XK18-10
XK26-13 — WHT-BLU (22)
XK26-10 — WHT-RED (22)
40
M2 (TERMINAL BOARD LOCATED INSIDE OF COVER)
1
2
3
4
5
6
7
M1
②
①
+
WHT-BLK — S2-B1
WHT-RED — T2-3







FRONT PANEL

MASTER

ITEM NO.	QTY REQD	SYM	GOVERNMENT/NASA NO.	KOLLSMAN PART NO.	CODE IDENT	NOMENCLATURE OR DESCRIPTION	MATERIAL	SPECIFICATION	UNIT WT

LIST OF PARTS AND MATERIALS

NEXT ASSY	USED ON
1017389	1016949

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOL ON: FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING
MATERIAL
CONTRACT NAS9-497

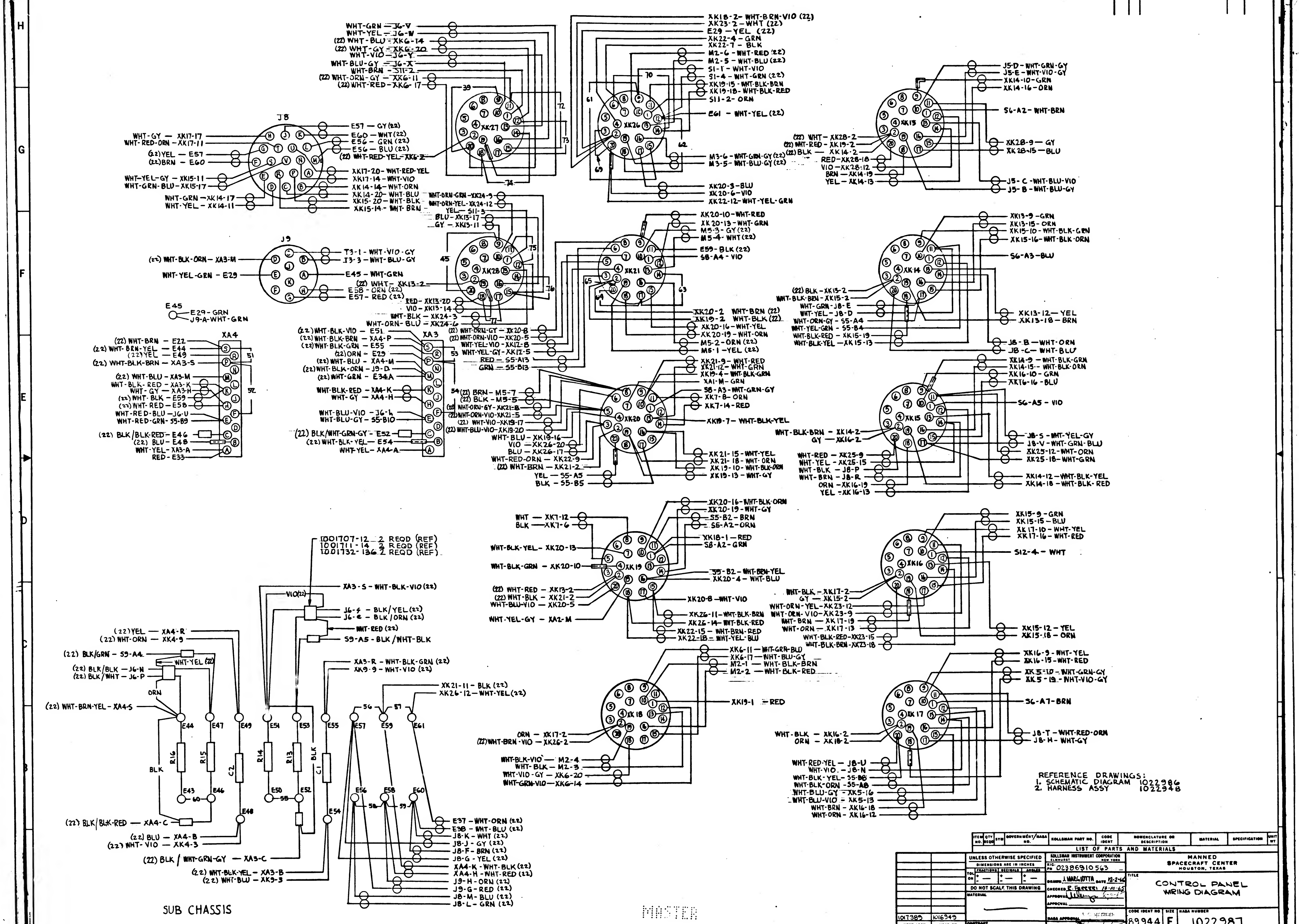
KOLLSMAN INSTRUMENT CORPORATION
ELMHURST NEW YORK
KIC PN 02386910563
DRAWN L MARGIOTTA DATE 12-3-65
CHECKED R. TEPPER 12-10-65
APPROVAL 12-10-65
APPROVAL
NASA APPROVAL E.C. HUTZLER
MIT APPROVAL

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

TITLE
CONTROL PANEL
WIRING DIAGRAM

CODE IDENT NO. 89944
SIZE E
NASA NUMBER 1022987
SCALE NONE
WEIGHT CALC ACTUAL
SHEET 3 OF 4

REVISIONS				
SYM	ZONE	DESCRIPTION	DATE	APPROVAL
REV	—	CLASS A RELEASE PER TDRR 256 .		



REFERENCE DRAWINGS:
1. SCHEMATIC DIAGRAM 1022986
2. HARNESS ASSY 1022948

ITEM NO.	QTY REQD	SYM	GOVERNMENT/NASA NO.	KOLLSMAN PART NO.	CODE IDENT	NOMENCLATURE OR DESCRIPTION	MATERIAL	SPECIFICATION	UNIT WT

LIST OF PARTS AND MATERIALS

1017389	1016949
NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOL ON FRACTIONS ± — DECIMALS ± — ANGLES ± —
DO NOT SCALE THIS DRAWING
MATERIAL —
CONTRACT NAS9-497

KOLLSMAN INSTRUMENT CORPORATION
ELMHURST NEW YORK
KIC PN 02386910563
DRAWN J. MARGIOTTA DATE 12-2-65
CHECKED R. FERRERI 12-10-65
APPROVAL 12-10-65
APPROVAL
NASA APPROVAL C. METZGER
MIT APPROVAL

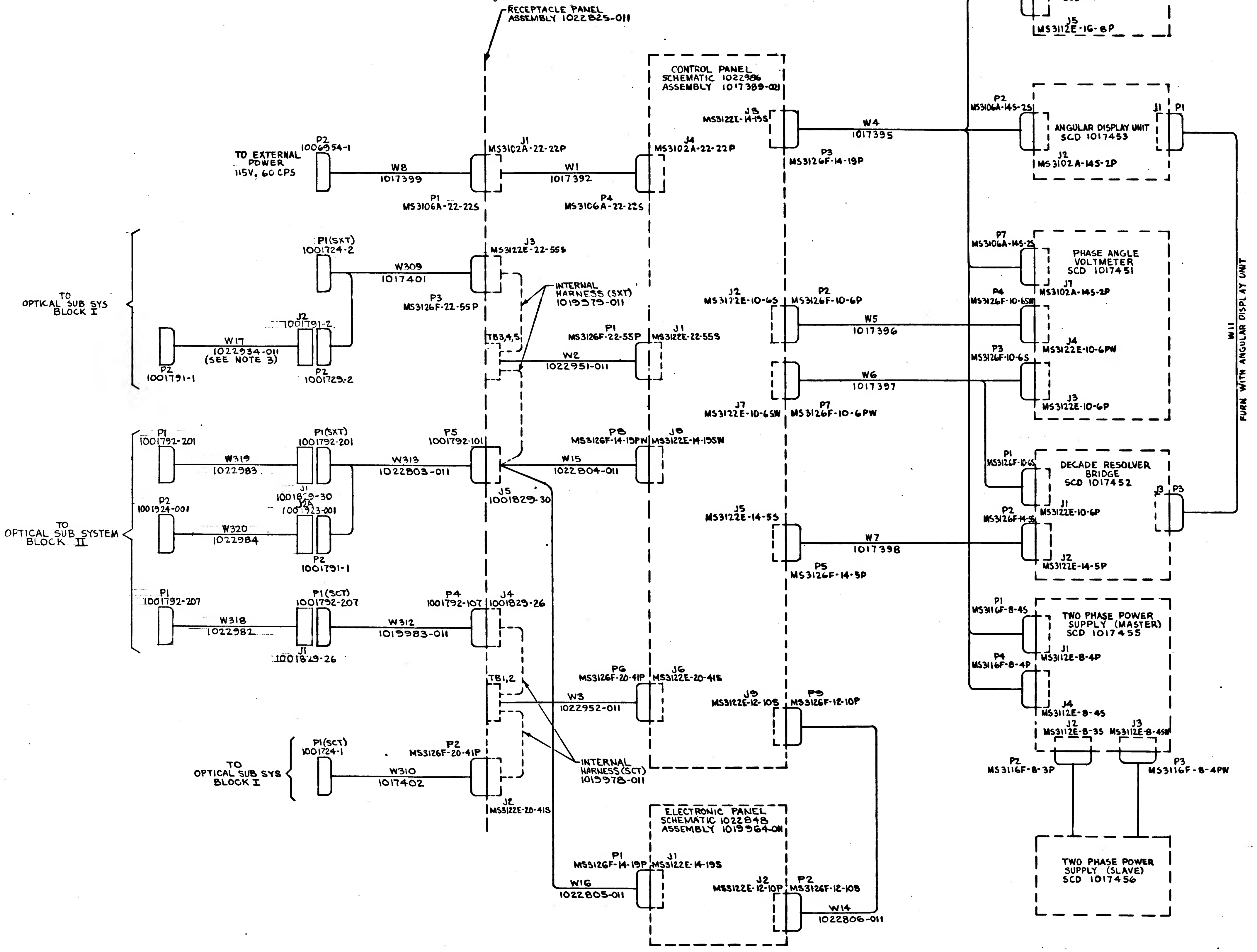
MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

TITLE
CONTROL PANEL
WIRING DIAGRAM

CODE IDENT NO 89944
SIZE E
NASA NUMBER 1022987
SCALE NONE
WEIGHT
CALC ACTUAL
SHEET 4 OF 4

NOTES:
1. ALL PART NUMBERS ARE FOR REFERENCE ONLY
2. INTERPRET DRAWING IN ACCORDANCE WITH MIL-D-70327
3. W17 CABLE USED WITH FUNCTIONAL TESTER BLK I AGE 50 AND UP.
4. W 318, W319, AND W320 USED ONLY FOR TACH NULL MEASUREMENTS

REVISIONS				
SYM	ZONE	DESCRIPTION	DATE	APPROVAL
REV.	-	CLASS A RELEASE PER TDRR [illegible]		



ITEM NO.	QTY REQD	SYM	GOVERNMENT/NASA NO.	KOLLSMAN PART NO.	CODE IDENT	NOMENCLATURE OR DESCRIPTION	MATERIAL	SPECIFICATION	UNIT WT

LIST OF PARTS AND MATERIALS

NEXT ASSY	USED ON
1016945	1016945

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOL ON: FRACTIONS ± ~ DECIMALS ± ~ ANGLES ± ~
DO NOT SCALE THIS DRAWING
MATERIAL —
CONTRACT NAS9-497

KOLLSMAN INSTRUMENT CORPORATION
ELMHURST NEW YORK
KIC PN 02386910572
DRAWN [illegible] DATE 12-2-65
CHECKED H DEBONIS 12-9-65
APPROVAL
APPROVAL
NASA APPROVAL A. C. METZGER
MIT APPROVAL

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

TITLE
FUNCTIONAL TESTER
INTERCONNECTION DIAGRAM

CODE IDENT NO. 89944
SIZE E
NASA NUMBER 1022939
SCALE ~
WEIGHT ~ CALC ACTUAL
SHEET 1 OF 1

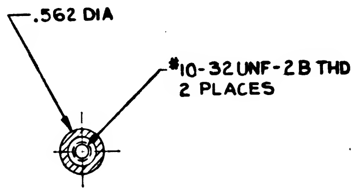
MASTER

REVISIONS TDRR 15564

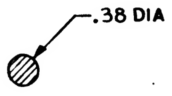
SYM	ZONE	DESCRIPTION	CHG NO.	DATE	APPD.

NOTES:

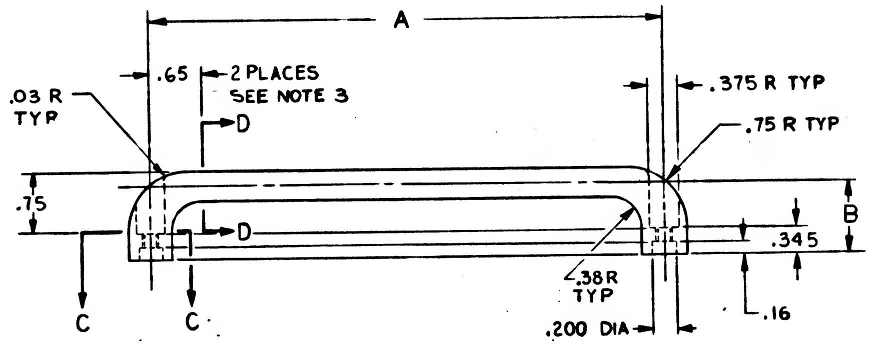
1. INTERPRET DRAWING PER MIL-D-70327.
2. MATERIAL: INVESTMENT CASTING ALUMINUM PER QQ-A-596, CLASS 8, COND T6.
3. MAKE TRANSITION FROM .562 DIA (SEC. C-C) TO .38 DIA (SEC. D-D) SMOOTH BLEND.
4. SURFACE ROUGHNESS 125√ ALL OVER.
5. FINISH:
   - A. CHEMICAL FILM PER MIL-A-8625 TYPE II.
   - B. APPLY ZINC-CHROMATE PRIMER PER MIL-P-6808.
   - C. APPLY LUSTERLESS ENAMEL TT-E-527, COLOR NO. 36231 (GRAY) OF FED-STD-595 ALL OVER PER ND1002110
6. IDENTIFY USING DRAWING NO. PER ND1002019.



SECTION C-C
TYP 2 PLACES



SECTION D-D



PART NO.	DIM. A	DIM. B
1023002-001	6.464	.94
1023002-002	7.620	1.25

NEXT ASSY	USED ON
1014664-011	1015023-021

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON

2 PLACE DECIMALS	3 PLACE DECIMALS	ANGLES
±.01	±.005	± –

DO NOT SCALE THIS DRAWING

MATERIAL
SEE NOTE 2

CONTRACT

AC SPARK PLUG DIVISION, GMC
MILWAUKEE, WISCONSIN

ACSP PN

DRAWN R. Rotta DATE 4-JAN 65
CHECKED 8 Jan 65
APPROVAL 1/19/65
APPROVAL

NASA APPROVAL W J Rhine 1-1965
MIT APPROVAL 19 Jan 65

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

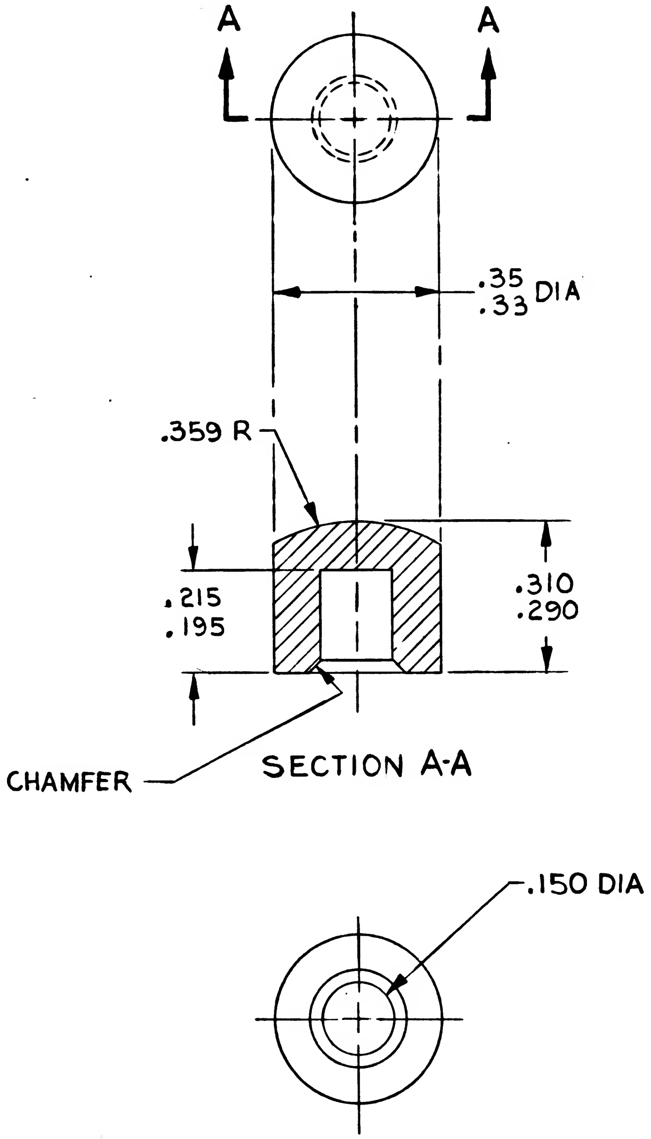
HANDLE

CODE IDENT NO.
SIZE D
1023002
SCALE 1:1
SHEET 1 OF 1

REVISIONS TDRR 15564					
SYM	ZONE	DESCRIPTION	CHG NO.	DATE	APPD.

NOTES:

1. INTERPRET DRAWING PER MIL-D-70327.
2. MECHANICAL REQUIREMENTS:
   - A. DIMENSIONS SHALL BE AS SHOWN.
   - B. MATERIAL: DELRIN OR EQUIV.
   - C. COLOR: LIGHT GRAY, DUPONT COLOR GY-601 OR EQUIV. (APPROXIMATES FED-STD-595 COLOR NO. 26492).
   - D. PART SHALL BE SAND BLASTED TO PRODUCE A DULL FINISH ON THE TOP AND OUTSIDE SURFACES.
3. IDENTIFY USING DRAWING NO. PER ND1002019.
4. MAY BE MADE FROM 1010475-1.



1014664-011	1015023-021
NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± — DECIMALS ±.005 ANGLES ± —
DO NOT SCALE THIS DRAWING

MATERIAL SEE NOTE 2 B

CONTRACT

AC SPARK PLUG DIVISION, GMC
MILWAUKEE, WISCONSIN
ACSP PN
DRAWN R. Rotela DATE 5 JAN 65
CHECKED 14 Jan 65
APPROVAL 1/19/65
APPROVAL
NASA APPROVAL 1-19-65
MIT APPROVAL 19 Jan 65

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

CAP, PUSHBUTTON

CODE IDENT NO. SIZE C 1023003
SCALE 4:1 SHEET 1 OF 1

MIL 1077C—P

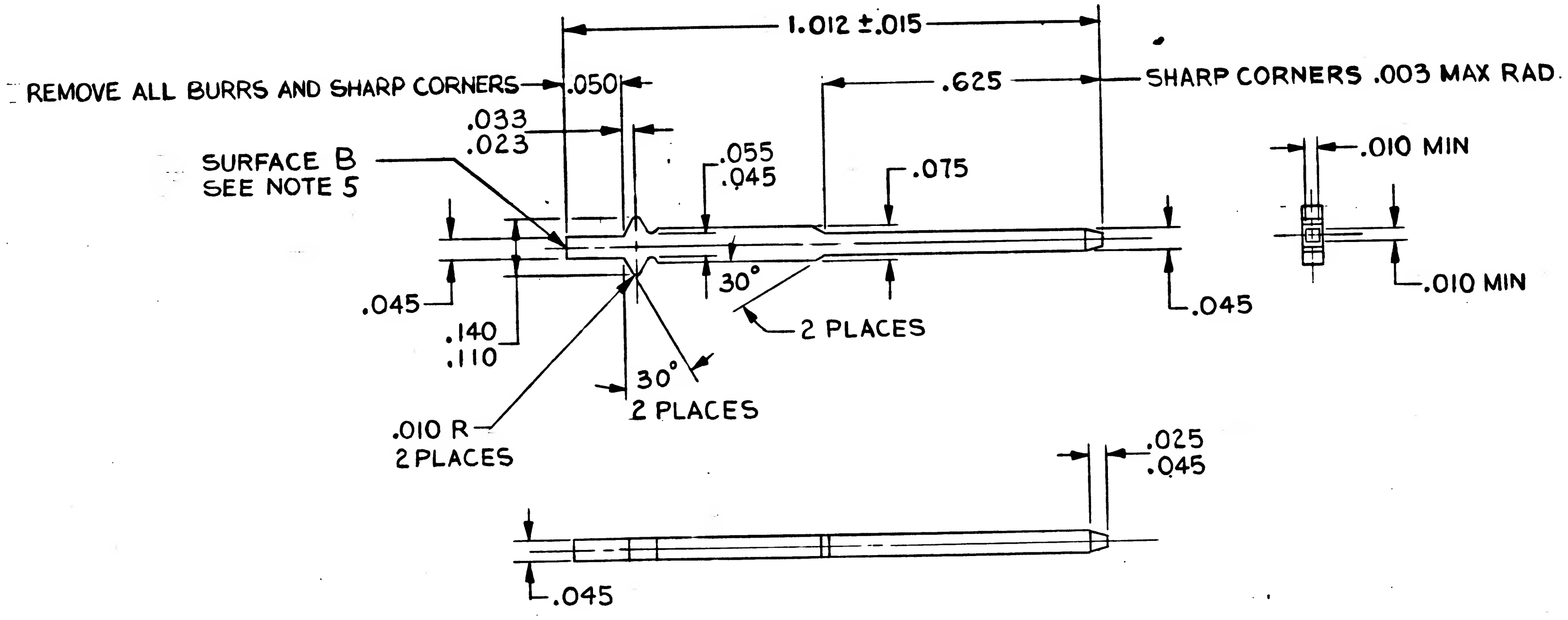
1023008

REVISIONS					
SYM	ZONE	DESCRIPTION	CHG NO.	DATE	APPD.
		INITIAL RELEASE CLASS A PER TDRR 16218		2/3/65	WK

16218

NOTES:

1. INTERPRET DRAWING PER MIL-D-70327.
2. MATERIAL:
   - A. BERYLLIUM COPPER ALLOY 170, COND A PER QQ-C-533.
   - B. MAY BE MADE FROM 1010659-6, -7, -8, -9 OR -10.
3. GENERAL MACHINING STANDARDS PER ND1002078.
4. HEAT TREAT PER MIL-H-7199, ROCKWELL 36C.
5. FINISH: EXCEPT SURFACE "B", GOLD PLATING .000050 MIN. PER MIL-G-45204 TYPE II OVER SILVER PLATE PER QQ-S-365, .0002 MIN THICKNESS.
6. IDENTIFY USING DWG NO. PER ND1002019.



1007583	1007583
NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON

FRACTIONS	DECIMALS	ANGLES
±	±.002	±5°

DO NOT SCALE THIS DRAWING

MATERIAL SEE NOTE 2

CONTRACT

AC SPARK PLUG DIVISION, GMC
MILWAUKEE, WISCONSIN

ACSP P
DRAWN R. Rotty DATE 18 Jan 65
CHECKED 19 Jan 65
APPROVAL 2/2/65
APPROVAL
NASA APPROVAL 4/5
MIT APPROVAL 3 Feb 65

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

TERMINAL, WRAPOST

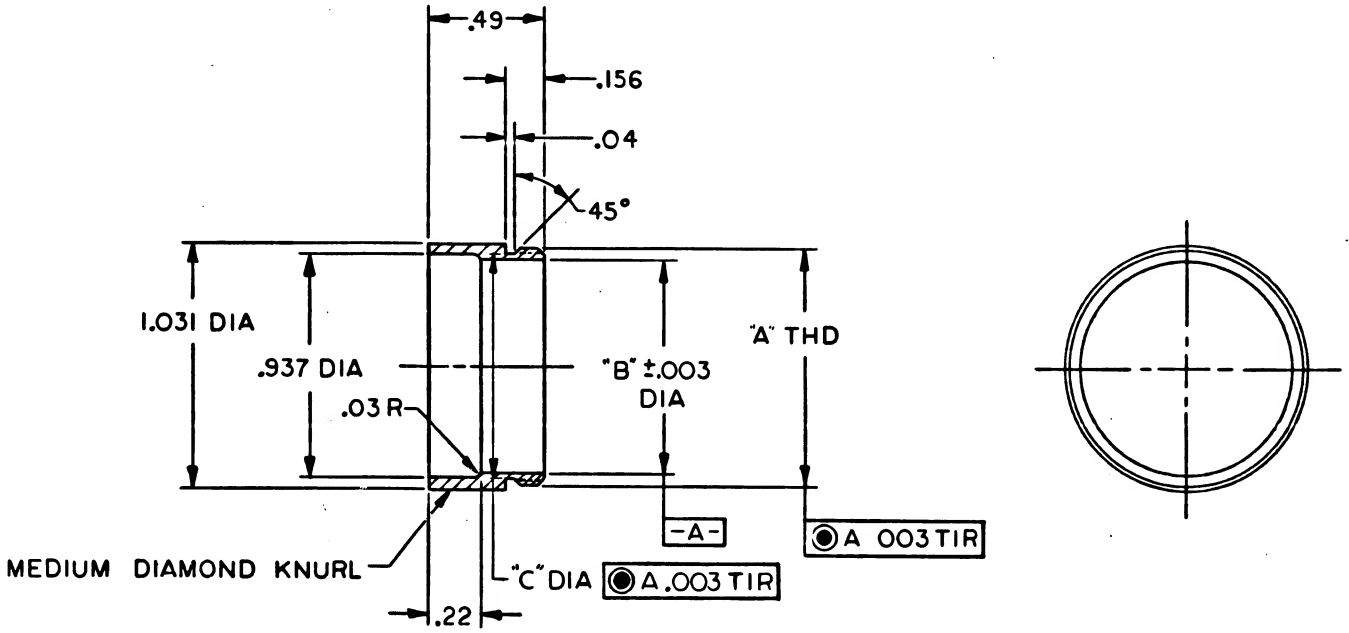
CODE IDENT NO.
SIZE C
1023008
SCALE 4:1
SHEET 1 OF 1

MIL 1077C-P

NOTICE – WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REVISIONS 16218

SYM	ZONE	DESCRIPTION	DR	CHK	DATE	APPROVED
		INITIAL RELEASE CLASS A PER TDRR 16218			2/1/65	WK
A		REPLACED WITH CHANGE BY REV. B PER TDRR 20527	RLP	MEM	2 JUL 65	



DASH NO	"A" THD	"B" DIA	"C" DIA $^{+.000}_{-.005}$
-1	7/8-20UNEF-2A	.775	.812
-2	1-20UNEF 2A	.900	.937
-3	13/16-20UNEF 2A	.722	.749

1023012 A

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327.
2. BREAK SHARP EDGES & REMOVE BURRS.
3. MATL. AL ALLOY 2024-T4 PER QQ-A-225/6
4. FINISH CLEAR CONDUCTIVE ANODIZE NON OUT GASING PER MIL-A-8625 TYPE II.
5. IDENTIFY PER ND1002019.

Ⓐ REPLACED WITH CHANGE BY REV Ⓑ

QTY REQD	PART OR IDENTIFYING NO.	MATERIAL OR NOTES	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY	USED ON

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
CAPACITOR VALUES ARE IN μf
RESISTOR VALUES ARE IN OHMS
TOLERANCES ON
FRACTIONS ± —
DECIMALS ± XX .01 XXX .005
ANGLES ± 1/2°
DO NOT SCALE THIS DRAWING

MATERIAL
SEE NOTE 3

MIT
INSTRUMENTATION LAB
CAMBRIDGE, MASS.

DRAWN Wunderlich 20-JAN-65
CHECKED
APPROVED N.E. Abraham 1-22-65
APPROVED Y.Z. Kim 2/2/65
APPROVED MIT W. Kupfer 3 Feb 65
APPROVED MSC K. Mitchell 2/3/65
DATE

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

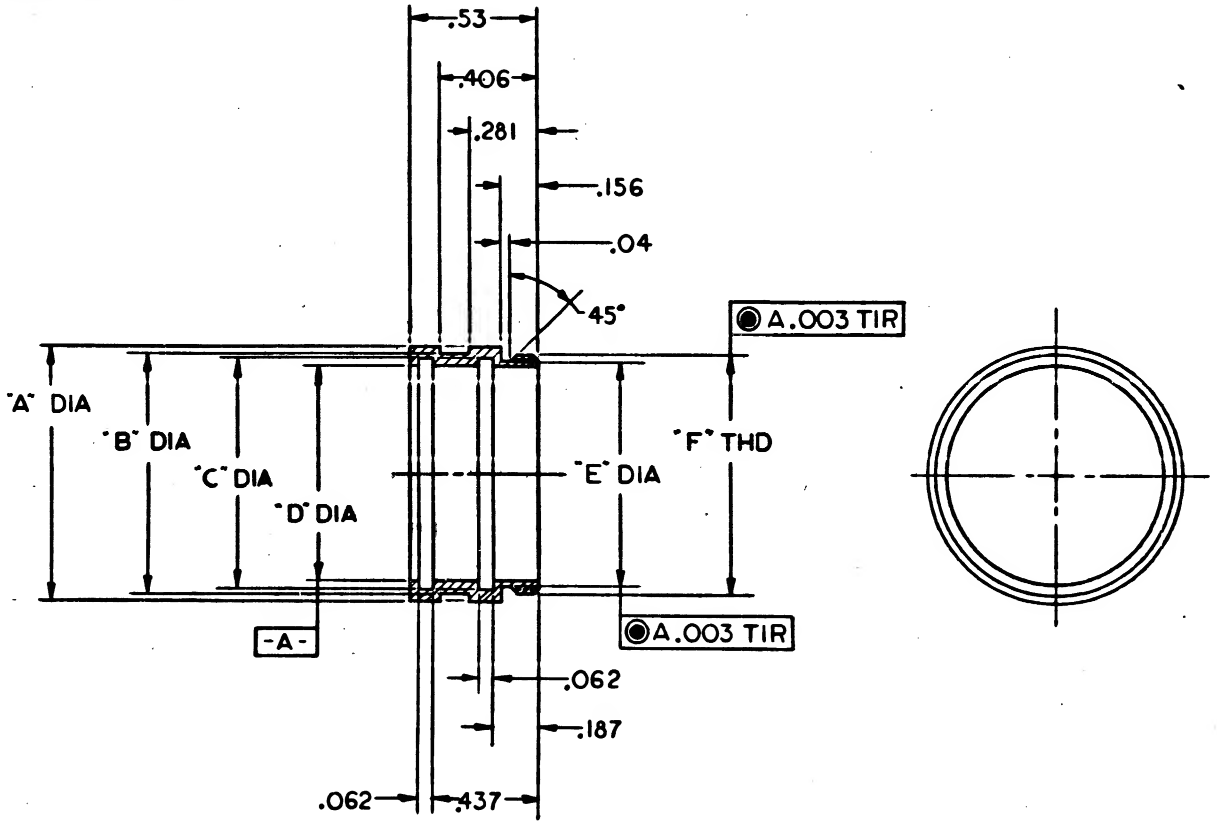
COUPLING, ADAPTER
DSM SERIES CONNECTORS

CODE IDENT NO.
SIZE C
DRAWING NO. 1023012
SCALE 2:1
SHEET 1 OF 1

NOTICE — WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REVISIONS

SYM	ZONE	DESCRIPTION	DR	CHK	DATE	APPROVED
B		B REPLACES REV A WITH CHANGE PER TDRR 20527			6/28/65	



DASH NO	"A" DIA	"B" DIA	"C" DIA	"D" DIA ±.003	"E" DIA $^{+.000}_{-.005}$	"F" THD
-1	1.062	1.000	.962	.900	.937	1-20UNEF-2A
-2	.937	.875	.837	.775	.812	7/8-20UNEF-2A
-3	.875	.812	.775	.712	.749	13/16-20UNEF-2A
-4	.812	.750	.712	.650	.687	3/4-20UNEF-2A
-5	.562	.500	.462	.400	.437	1/2-28UNEF-2A
-6	.437	.375	.337	.275	.312	3/8-32UNEF-2A

NOTES

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327.
2. BREAK SHARP EDGES REMOVE BURRS.
3. MATL AL ALY 2024-T4 PER QQ-A-225/6
4. FINISH CLEAR CONDUCTIVE ANODIZE NON OUT GASING PER MIL-A-8625 TYPE II.
5. IDENTIFY PER ND1002019.

Ⓑ REPLACES REV A WITH CHANGE

QTY REQD	PART OR IDENTIFYING NO.	MATERIAL OR NOTES	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

1015085	
NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
CAPACITOR VALUES ARE IN µf
RESISTOR VALUES ARE IN OHMS
TOLERANCES ON
FRACTIONS ± — DECIMALS ±XX .01 ±XXX .005 ANGLES ± 1/2°
DO NOT SCALE THIS DRAWING

MATERIAL
SEE NOTE 3

MIT
INSTRUMENTATION LAB
CAMBRIDGE, MASS.

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

DRAWN Wunderlich 1-20-65
CHECKED
APPROVED D. Barta 1-20-65
APPROVED 6/28/65
APPROVED MIT W Cupfer 28 Jun 65
APPROVED MSC 6/28/65
DATE

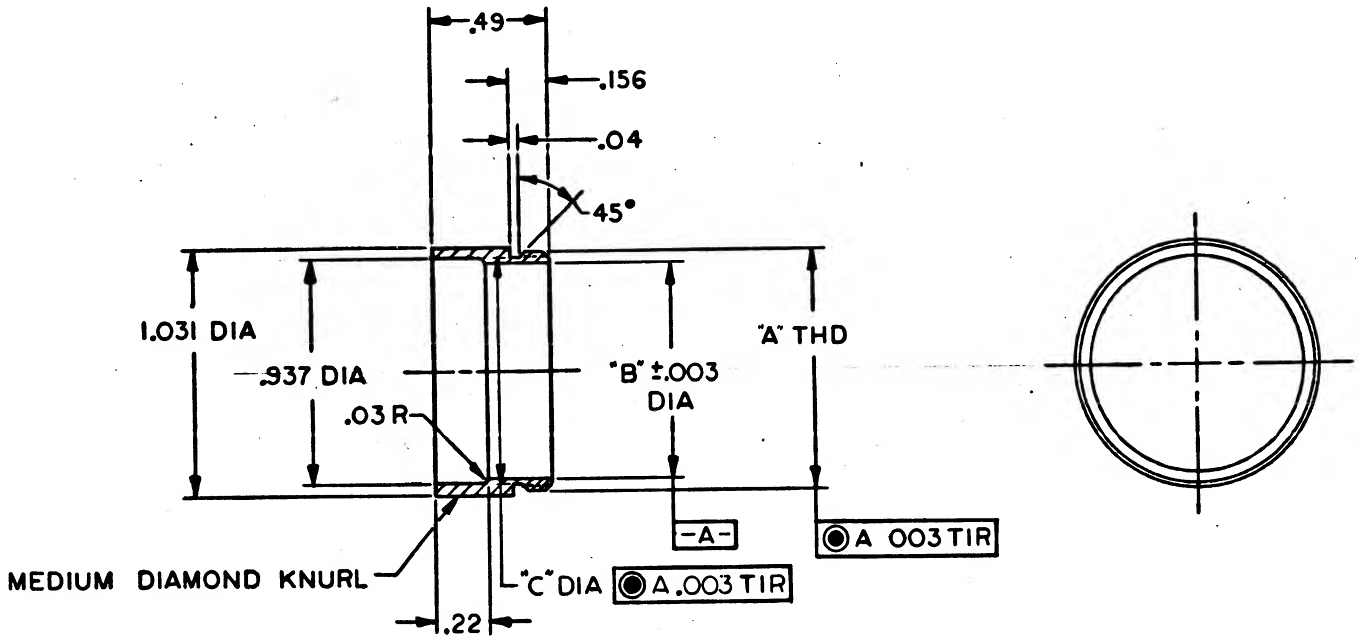
ADAPTER, POTTING MOLD
SUBMINIATURE CONNECTOR

CODE IDENT NO.	SIZE	DRAWING NO.
80230	C	1023012
SCALE 2 1		SHEET 1 OF 1

NOTICE – WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REVISIONS 16218

SYM	ZONE	DESCRIPTION	DR	CHK	DATE	APPROVED
		INITIAL RELEASE CLASS A PER TDRR 16218			2/3/65	WM



DASH NO	"A" THD	"B" DIA	"C" DIA $^{+.000}_{-.005}$
-1	7/8-20UNEF-2A	.775	.812
-2	1-20UNEF 2A	.900	.937
-3	13/16-20UNEF 2A	.722	.749

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327.
2. BREAK SHARP EDGES & REMOVE BURRS.
3. MATL. AL ALLOY 2024-T4 PER QQ-A-225/6
4. FINISH CLEAR CONDUCTIVE ANODIZE NON OUT GASING PER MIL-A-8625 TYPE II.
5. IDENTIFY PER ND1002019.

QTY REQD	PART OR IDENTIFYING NO.	MATERIAL OR NOTES	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY	USED ON

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
CAPACITOR VALUES ARE IN μf
RESISTOR VALUES ARE IN OHMS
TOLERANCES ON
FRACTIONS ± — DECIMALS ±XX .01 ±XXX .005 ANGLES ± 1/2°
DO NOT SCALE THIS DRAWING

MATERIAL
SEE NOTE 3

MIT
INSTRUMENTATION LAB
CAMBRIDGE, MASS.

DRAWN	Hunderkik	20-Jan-65
CHECKED		
APPROVED	N E Abraham 1-22-65	
APPROVED		2/2/65
APPROVED MIT	W Kupfer	3 Feb 65
APPROVED MSC		2/3/65
		DATE

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

COUPLING, ADAPTER
DSM SERIES CONNECTORS

CODE IDENT NO.	SIZE	DRAWING NO.
	C	1023012

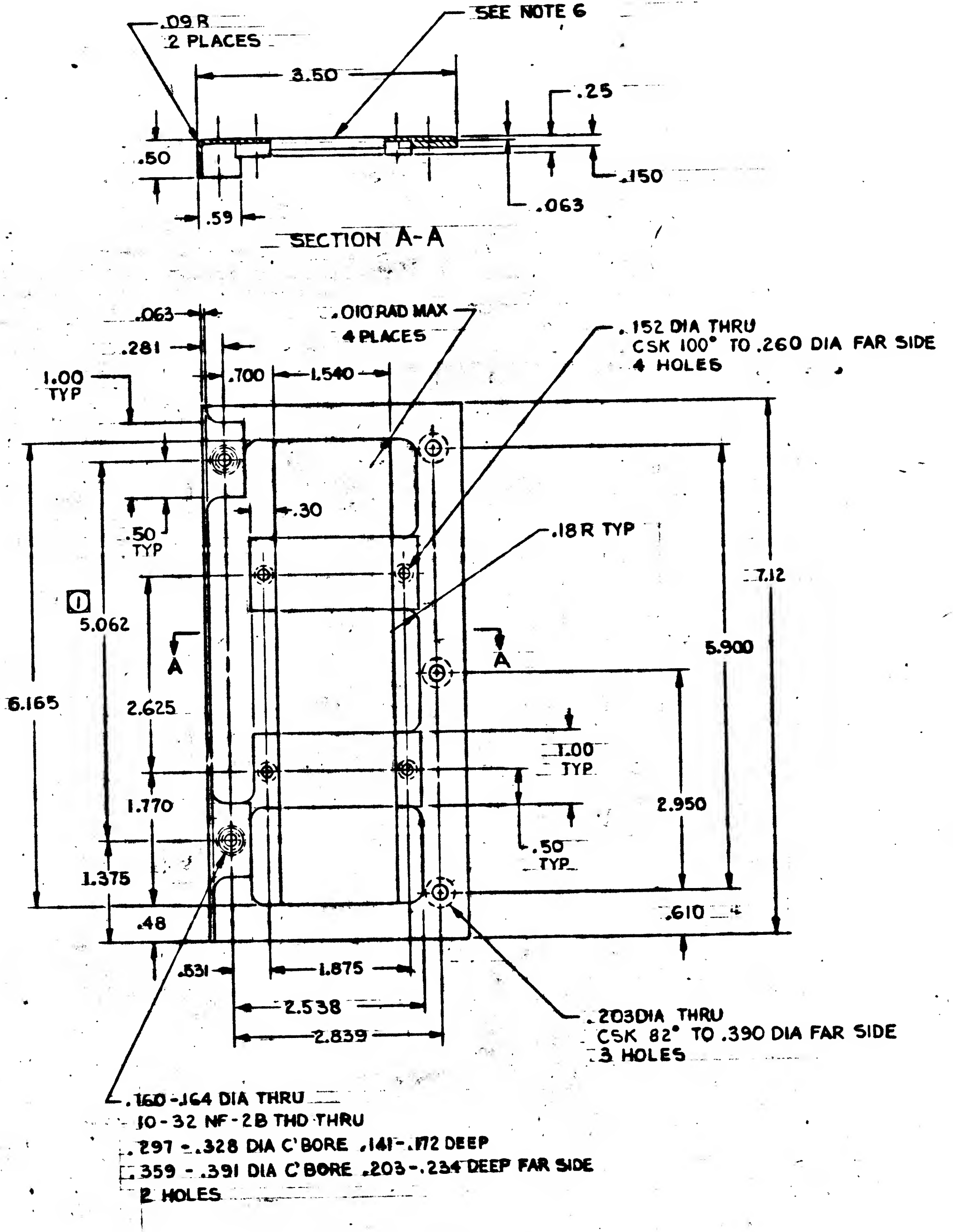
SCALE 2:1 SHEET 1 OF 1

MASTER

1023015 | 2

SYM	ZONE	DESCRIPTION		DATE	APPD.
		REVISIONS			
		INITIAL CLASS A RELEASE TDRR NO.	CHG NO.		

NOTES:
1. INTERPRET DRAWING PER MIL-D-70327.
2. MATERIAL: AL ALLOY 5052-H32 PER QQ-A-250A/8.
3. GENERAL MACHINING STANDARDS IN ACCORDANCE WITH ND1002078.
4. SURFACE ROUGHNESS: $\overset{125}{\surd}$ ALL OVER.
5. ANODIZE PER MIL-A-8625 TYPE II ALL OVER.
6. FINISH FOR FRONT AND EDGES ONLY:
   - A. APPLY ZINC CHROMATE PRIMER PER MIL-P-6808.
   - B. APPLY LUSTERLESS ENAMEL TT-E-527 COLOR GRAY NO. 36231 OF FED. STD 595.
7. IDENTIFY USING DRAWING NO. AND MFG SYM PER ND1002019.
8. $\boxed{1}$ DIMENSION CONTROLLED BY ICD MH01-01204-116.



1023014-011	1014623-011
NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
2 PLACE DECIMALS ±.01
3 PLACE DECIMALS ±.005
ANGLES ±—
DO NOT SCALE THIS DRAWING
MATERIAL SEE NOTE 2
CONTRACT

AC SPARK PLUG DIVISION, GMC
MILWAUKEE, WISCONSIN
ACSP PN
DRAWN R. Rotta DATE FEB 18 65
CHECKED
APPROVAL 1/2/65
APPROVAL C Watson 2-9-65
NASA APPROVAL 3-4-65
MIT APPROVAL W Ruffin 11 Mar 65

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

HOUSING,
INDICATOR READOUT

CODE IDENT NO.
SIZE D
1023015
SCALE 1:1
SHEET 1 OF 1

LIST OF MATERIALS

SEE NOTE NUMBER	ITEM	QTY	PART NO.	DESCRIPTION
	1	1	1023017- 1	WIRE PER 1010789-11, YEL JKT 24AWG YEL. 17 FT 2.5 IN. TOTAL LENGTH
	2	1	1023017- 2	WIRE PER 1010789-12, YEL JKT 24AWG YEL, RED, 13 FT 4.0 IN. TOTAL LENGTH
	3	1	1023017- 3	WIRE PER 1010789-13, YEL JKT 24AWG YEL, RED, GRN. 8 FT 9.3 IN. TOTAL LENGTH
	4	1	1023017- 4	WIRE PER 1010789-1, 24AWG YEL. 150 FEET 9.8 IN. TOTAL LENGTH
	5	1	1023017- 5	WIRE PER 1010789, 22AWG YELLOW 47.0 IN. TOTAL LENGTH
7	6	18	1010490-170	INSULATION SLEEVING HEAT SHRINK
7	7	9	1010490-168	INSULATION SLEEVING HEAT SHRINK
7	8	AR	1012503- 1	COMPOUND, POLYURETHANE
7	9	AR	1012503- 2	COMPOUND, POLYURETHANE
7	10	9	1010402- 1	SOLDER SLEEVE
7	11	20	1010402- 2	SOLDER SLEEVE
7	12	18	1010490-172	INSULATION SLEEVING HEAT SHRINK
7	13	1	1010812- 3	SEAL, CONNECTOR
7	14	108	1010738- 1	CONTACT ELECTRICAL
7	15	1	1010347- 1	CONNECTOR, PLUG, ELECTRICAL
	16	AR	QQ-S-571	SOLDER SN60S

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS
SIZE A
1023017
SCALE-NONE REV LTR SHEET 5 OF 27

LIST OF MATERIALS

SEE NOTE NUMBER	ITEM	QTY	PART NO.	DESCRIPTION
	17	AR	MIL-F-14256 TYPE A or W	FLUX
7	18	1	1010638- 6	TERMINAL
7	19	AR	1012507-001	LACING TAPE

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS
SIZE A
1023017
SCALE-NONE REV LTR SHEET 6 OF 27

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 1	4		A1-1 T1-3	21 22				.25 .25	YES YES			
A 2	4		A1-2 S3-2-C	21 47				.25 .25	YES YES			
A 3	4		A1-3 S3-2-C	21 47				.25 .25	YES YES			
A 4	2				3.50 8.00	3.25 7.75				6B	6 11, 6	
A 4B	4		E2 SHLD A4	48				.25 .25	NO YES			
A 4R			A1-12 S11-4-NC	21 27				.25 .25	YES YES			
A 4Y			A1-4 S15-1-C	21 29			2.00 2.00	.25 .25	YES YES			
A 5	2				3.50 7.50	3.25 7.25				6B	6 11, 6	
A 5B	4		E2 SHLD A5	48				.25 .25	NO YES			
A 5R			A1-10 S11-3-NC	21 27				.25 .25	YES YES			
A 5Y			A1-8 S11-9-NO	21 28			1.00	.25 .25	YES YES			
A 6	2				3.50 3.00	3.25 2.75				6B	6 11, 6	

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS
SIZE A
1023017
SCALE-NONE REV LTR SHEET 7 OF 27

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 6B	4		E2 SHLD A6	48				.25 .25	NO YES			
A 6R			A1-5 S11-5-NC	21 27				.25 .25	YES YES			
A 6Y			A1-9 S11-5-NO	21 27				.25 .25	YES YES			
A 7	2				3.50 3.50	3.25 3.25				6B	6 11, 6	
A 7B	4		E2 SHLD A7	48				.25 .25	NO YES			
A 7R			A1-6 S11-6-NC	21 27				.25 .25	YES YES			
A 7Y			A1-7 S11-6-NO	21 27				.25 .25	YES YES			
A 8	2				2.50 3.75	2.25 3.50				6B	11, 6 6	
A 8A	4		SHLD A8 E3	51				.25 .25	YES NO			
A 8R			P1-80 T1-1	1 22				.10 .25	 YES		14	
A 8Y			P1-69 T1-2	1 22				.10 .25	NO YES		14	
A 9	4		S3-2-NO T1-1	47 22				.25 .25	YES YES			

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS
SIZE A
1023017
SCALE-NONE REV LTR SHEET 8 OF 27

2651

APPLICATION	
NEXT ASSY	USED ON
1014578-041	1014513

REVISIONS			
SYM	DESCRIPTION	DATE	APPROVAL

REV	+	+	+	+
SHEET	24	25	26	27

REV STATUS OF SHEETS																							
REV	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
SHEET	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23

AC SPARK PLUG DIVISION, GMC
MILWAUKEE, WISCONSIN

ACSP PN

DRAWN E. Miller DATE 7APR65
CHECKED Ed Foster 14APR65
APPROVAL D.W. Milne 15Apr65
APPROVAL 8/11/65
NASA APPROVAL 8/11/65
MIT APPROVAL 65
CONTRACT NAS9-497

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

WIRING HARNESS A
(G&N PANEL)

CODE IDENT NO. 80230
SIZE
1023017
REV
SCALE
SHEET 1 OF 27

GENERAL NOTES

NOTE NUMBER	DESCRIPTION
1	SHIELD TERMINATION FIGURES ARE PER ND1002071
2	INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327.
3	MARK LEAD IDENTIFICATION ON SINGLE CONDUCTORS PER ND1002019 OMITTING ALL SUFFIX LETTERS EXCEPT A AND B.
4	SOLDER PER ND1002071 USING ITEMS 16 AND 17.
5	GRID MODULE IS 1 INCH BASIC.
6	UNLESS OTHERWISE SPECIFIED - FEATURE CENTERLINES ARE LOCATED WITHIN + OR - 1/4 INCH. END OF HOOKUP WIRES OR ACCESSORIES ARE LOCATED WITHIN + OR - 1/8 INCH.
7	VENDOR ITEM - SEE SPECIFICATION CONTROL DRAWING.
8	THE SUFFIX LETTER OF A LEAD IDENTIFICATION NUMBER INDICATES LEAD SHIELDING OR LEAD COLOR. A - FROM END SHIELD B - TO END SHIELD R - RED Y - YELLOW G - GREEN
9	INSTALL CRIMP STYLE TERMINALS IN ACCORDANCE WITH ND1002206.
10	ASSEMBLE PER ND1002032.
11	TWIST LEADS A1, A2 AND A3 APPROX 18 TURNS PER FOOT
12	TWIST LEADS A32 AND A33 APPROX 18 TURNS PER FOOT
13	TWIST LEADS A58 AND A59 APPROX 18 TURNS PER FOOT

GENERAL NOTES

NOTE NUMBER	DESCRIPTION
14	TWIST LEADS A60 AND A61 APPROX 18 TURNS PER FOOT
15	TWIST LEADS A64 AND A65 APPROX 18 TURNS PER FOOT
16	TWIST LEADS A66,A67,A68,A79 AND A80 APPROX 18 TURNS PER FOOT
17	TWIST LEADS A97 AND A98 APPROX 18 TURNS PER FOOT
18	TWIST LEADS A99 AND A100 APPROX 18 TURNS PER FOOT
19	TWIST LEADS A112 AND A113 APPROX 18 TURNS PER FOOT
20	TWIST LEADS A130,A131 AND A132 APPROX 18 TURNS PER FOOT
21	TWIST LEADS A134,A135 AND A136 APPROX 18 TURNS PER FOOT
22	TWIST LEADS A138,A139 AND A140 APPROX 18 TURNS PER FOOT
23	TWIST LEADS A68,A72 AND A73 APPROX 18 TURNS PER FOOT
24	PARTIAL REFERENCE DESIGNATIONS ARE SHOWN. FOR COMPLETE DESIGNATION PREFIX WITH 50A1
25	LACE HARNESS USING ITEM 19.
26	USE A FIGURE EIGHT TYPE STITCH IN BRANCH A BETWEEN SECTION B-B AND C-C (APPROXIMATELY 4 INCHES). WIDTH SHALL NOT EXCEED 5/16 INCH PER BUNDLE. LEADS BREAKING OUT ON TOP SIDE TO TERMINATION POINTS 34 THRU 39, 43 AND 44 SHALL BE ROUTED IN TOP BUNDLES.
27	ENCAPSULATE REAR OF CONNECTOR USING ITEMS 8 AND 9 PER ND1002236.
28	IDENTIFY USING DRAWING NUMBER PER ND1002019
29	SERIALIZE PER ND1002023.

GENERAL NOTES

NOTE NUMBER DESCRIPTION

TOLERANCE CHART, UNLESS OTHERWISE SPECIFIED ---

APPLICABLE LENGTH FOR STRIP WIRE, STRIP JACKET, CUT WIRE OR CUT SHIELD.	TOLERANCE			
	STRIP		CUT	
	WIRE	JACKET	WIRE	SHIELD
UNDER 1 INCH	+.03-.00	+.06-.06	+.06-.06	+.06-.06
1 INCH TO 6 INCHES	+.06-.00	+.25-.25	+.25-.25	+.25-.25
6 INCHES TO 6 FEET		+.50-.50	+.50-.50	+.50-.50

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 10	4		S3-1-NC T1-7	47 22				.25 .25	YES YES			
A 11	4		S3-1-NO T1-5	47 22				.25 .25	YES YES			
A 14	4		P1-92 S16-7-C	1 39				.10 .25	NO YES		14	
A 15	4		P1-74 S16-8-NC	1 39				.10 .25	NO YES		14	
A 16	4		P1-90 S16-4-C	1 55				.10 .25	NO YES		14	
A 17	4		P1-100 S16-3-C	1 55				.10 .25	NO YES		14	
A 18	4		P1-88 S16-1-NC	1 55				.10 .25	NO YES		14	
A 19	4		P1-87 S16-2-NC	1 55				.10 .25	NO YES		14	
A 20	4		P1-101 S16-3-NC	1 55				.10 .25	NO YES		14	
A 21	4		P1-94 S16-4-NC	1 55				.10 .25	NO YES		14	
A 22	4		S16-1-NC S16-6-C	55 39				.25 .25	YES YES			
A 23	4		P1-76 S16-5-NC	1 39				.10 .25	NO YES		14	

MANNED SPACECRAFT CENTER HOUSTON, TEXAS | SIZE A | 1023017
SCALE-NONE | REV LTR | SHEET 9 OF 27

MIL 2084 4-63

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 24	4		P1-75 S16-6-NC	1 39				.10 .25	NO YES		14	
A 25	4		P1-105 S16-7-NC	1 39				.10 .25	NO YES		14	
A 26	1				2.50 3.50	2.25 3.25				6B	10, 12 12	
A 26A	4		SHLD A26 E3	 51				.25 .25	YES NO			
A 26Y			P1-56 S11-8-NC	1 28				.10 .25	NO YES		14	
A 27	1				2.50 3.50	2.25 3.25				6B	10, 12 12	
A 27A	4		SHLD A27 E3	 51				.25 .25	YES NO			
A 27Y			P1-47 S11-11-NC	1 28				.10 .25	NO YES		14	
A 28	1				2.50 3.50	2.25 3.25				6B	10, 12 12	
A 28A	4		SHLD A28 E3	 51				.25 .25	YES NO			
A 28Y			P1-48 S11-10-NC	1 28				.10 .25	NO YES		14	
A 30	1				2.50 3.50	2.25 3.25				6B	10, 12 12	

MANNED SPACECRAFT CENTER HOUSTON, TEXAS | SIZE A | 1023017
SCALE-NONE | REV LTR | SHEET 10 OF 27

MIL 2084 4-63

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 30A	4		SHLD A30 E4	 52				.25 .25	YES NO			
A 30Y			P1-49 S15-8-C	1 30				.10 .25	NO YES		14	
A 31	1				2.50 3.50	2.25 3.25				6B	10, 12 12	
A 31A	4		SHLD A31 E4	 52				.25 .25	YES NO			
A 31Y			P1-38 S15-8-NC	1 30				.10 .25	NO YES		14	
A 32	4		S15-8-C S11-5-NO	30 27				.25 .25	YES YES			
A 33	4		S15-8-NC S11-6-NO	30 27				.25 .25	YES YES			
A 34	4		P1-72 S11-1-NC	1 27				.10 .25	NO YES		14	
A 35	3				2.75 8.00	2.50 7.75				6A	11, 7 7	
A 35A	4		SHLD A35 E5	 53				.25 .25	YES NO			
A 35G			P1-37 S11-12-NC	1 28				.10 .25	NO YES		14	
A 35R			P1-25 S11-2-NC	1 27				.10 .25	NO YES		14	

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LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 35Y			P1-36 S11-12-C	1 28				.10 .25	NO YES		14	
A 36	4		S11-12-C S11-2-C	28 27				.25 .25	YES YES			
A 37	4		P1-1 S15-7-NC	1 30				.10 .25	NO YES		14	
A 38	4		S15-7-NC S11-1-C	30 27				.25 .25	YES YES			
A 39	4		S11-1-C S14-2-C	27 25				.25 .25	YES YES			
A 41	1				4.00 4.00	3.75 3.75				6A	10, 12 12	
A 41A	4		SHLD A41 E5	 53				.25 .25	NO NO			
A 41Y			P1-96 S4-1-NO	1 26				.10 .25	NO YES		14	
A 42	4		S11-5-C S11-6-C	27 27				.25 .25	YES YES			
A 43	4		S11-6-C S4-3-NC	27 26				.25 .25	YES YES			
A 44	4		S15-6-NC S15-2-NC	30 29				.25 .25	YES YES			
A 45	4		S11-4-C S15-2-NC	27 29				.25 .25	YES YES			

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LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 46	4		S11-11-C S11-5-C	28 27				.25 .25	YES YES			
A 47	4		S11-4-NO S11-10-C	27 28				.25 .25	YES YES			
A 48	4		S11-10-NO S15-1-NC	28 29				.25 .25	YES YES			
A 49	2				3.50 2.50	3.25 2.25				6A	11, 6 6	
A 49A	4		SHLD A49 E4	 52				.25 .25	YES NO			
A 49R			P1-35 S15-2-C	1 29				.10 .25	NO YES		14	
A 49Y			P1-34 S15-2-NO	1 29				.10 .25	NO YES		14	
A 50	4		S11-3-C S15-4-NC	27 29				.25 .25	YES YES			
A 51	4		S11-9-C S15-3-C	28 29				.25 .25	YES YES			
A 52	4		S11-8-NO S15-3-NC	28 29				.25 .25	YES YES			
A 53	2				3.50 2.50	3.25 2.25				6A	11, 6 6	
A 53A	4		SHLD A53 E4	 52				.25 .25	YES NO			

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LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 53R			P1-19 S15-4-C	1 29				.10 .25	NO YES		14	
A 53Y			P1-33 S15-4-NO	1 29				.10 .25	NO YES		14	
A 54	4		P1-99 S15-7-C	1 30				.10 .25	NO YES		14	
A 55	3				3.00 6.50	2.75 6.25				 6B	7 11, 7	
A 55B	4		E2 SHLD A55	48				.25 .25	NO YES			
A 55G			S12-3-NO S15-5-C	24 30				.25 .25	YES YES			
A 55R			S12-2-NO S15-3-NO	24 29			 3.00	.25 .25	YES YES			
A 55Y			S12-1-NO S15-6-C	24 30				.25 .25	YES YES			
A 56	3				3.00 3.25	2.75 3.00				6B	11, 7 7	
A 56A	4		SHLD A56 E5	 53				.25 .25	YES NO			
A 56G			P1-24 S12-1-C	1 24			.50	.10 .25	NO YES		14	
A 56R			P1-23 S12-2-C	1 24			.25	.10 .25	NO YES		14	

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LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 56Y			P1-10 S12-3-C	1 24				.10 .25	NO YES		14	
A 57	3				2.50 3.50	2.25 3.25				6B	11 7	
A 57A	4		SHLD A57 E5	 53				.25 .25	YES NO			
A 57G			P1-22 S12-3-NC	1 24			1.00	.10 .25	NO YES		14	
A 57R			P1-9 S12-2-NC	1 24			.25	.10 .25	NO YES		14	
A 57Y			P1-8 S12-1-NC	1 24			.50	.10 .25	NO YES		14	
A 58	4		P1-84 S17-2-NC	1 45				.10 .25	NO YES		14	
A 59	4		P1-54 S17-1-NC	1 45				.10 .25	NO YES		14	
A 60	4		S17-2-NC S12-4-NO	45 24				.25 .25	YES YES			
A 61	4		S17-1-NC S12-4-NC	45 24				.25 .25	YES YES			
A 62	4		S12-4-C XDS12-HI	24 23				.25 .25	YES YES			
A 64	4		XDS4-LO XDS3-LO	20 5				.25 .25	YES YES			

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LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 65	4		XDS4-HI XDS3-HI	20 5				.25 .25	YES YES			
A 66	4		P1-52 XDS12-LO	1 23				.10 .25	NO YES		14	
A 67	4		P1-61 S1-2-NC	1 44				.10 .25	NO YES		14	
A 68	4		P1-62 S2-1-C	1 19				.10 .25	NO YES		14	
A 69	4		S1-1-C S18-3-NC	44 31				.25 .25	YES YES			
A 70	4		S17-2-C S24-1-NO	45 46				.25 .25	YES YES			
A 72	4		S24-1-NO S2-1-C	46 19				.25 .25	YES YES			
A 73	4		XDS12-LO XDS4-LO	23 20				.25 .25	YES YES			
A 74	4		S2-1-NC XDS4-HI	19 20				.25 .25	YES YES			
A 75	4		P1-32 S25-1-NO	1 46				.10 .25	NO YES		14	
A 76	4		S25-1-NO R1-CW	46 46				.25 .25	YES YES			
A 77	4		P1-44 R1-CCW	1 46				.10 .25	NO YES		14	

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LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 78	4		P1-26 S25-1-C	1 46				.10 .25	NO YES		14	
A 79	4		P1-63 S24-1-C	1 46				.10 .25	NO YES		14	
A 80	4		P1-64 S24-1-C	1 46				.10 .25	NO YES		14	
A 87	4		P1-41 S10-1	1 6				.10 .25	NO YES		14	
A 88	4		P1-50 S10-3	1 6				.10 .25	NO YES		14	
A 93	4		P1-73 S1-1-NC	1 44				.10 .25	NO YES		14	
A 95	4		P1-29 S1-2-C	1 44				.10 .25	NO YES		14	
A 96	4		P1-71 S4-3-NC	1 26				.10 .25	NO YES		14	
A 97	4		P1-60 S4-2-NO	1 26				.10 .25	NO YES		14	
A 98	4		P1-70 S4-2-C	1 26				.10 .25	NO YES		14	
A 99	4		P1-2 S4-3-NO	1 26				.10 .25	NO YES		14	
A 100	4		P1-21 S4-3-C	1 26				.10 .25	NO YES		14	

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LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 101	1				4.00 3.50	3.75 3.25				6A	10, 12 12	
A 101A	4		SHLD A101 E5	 53				.25 .25	YES NO			
A 101Y			P1-82 S4-1-C	1 26				.10 .25	NO YES		14	
A 102	4		P1-58 S14-1-NC	1 25				.10 .25	NO YES		14	
A 103	4		P1-59 S14-1-NO	1 25				.10 .25	NO YES		14	
A 104	3				2.50 2.50	2.25 2.25				6B	11, 7 7	
A 104A	4		SHLD A104 E6	 54				.25 .25	YES NO			
A 104G			P1-42 S13-1-C	1 8				.10 .25	NO YES		14	
A 104R			P1-31 S13-1-NO	1 8				.10 .25	NO YES		14	
A 104Y			P1-30 S13-1-NC	1 8				.10 .25	NO YES		14	
A 105	2				3.50 2.50	3.25 2.25				6A	11, 6 6	
A 105A	4		SHLD A105 E6	 54				.25 .25	YES NO			

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LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 105R			P1-55 S18-2-NO	1 31				.10 .25	NO YES		14	
A 105Y			P1-46 S18-2-NC	1 31				.10 .25	NO YES		14	
A 106	1				3.50 2.50	3.25 2.25				6A	10, 12 12	
A 106A	4		SHLD A106 E6	 54				.25 .25	YES NO			
A 106Y			P1-53 S18-1-NC	1 31				.10 .25	NO YES		14	
A 108	4		P1-51 S18-3-NC	1 31				.10 .25	NO YES		14	
A 109	4		S18-3-C S21-1-C	31 33				.25 .25	YES YES			
A 110	4		P1-66 S9-2-C	1 34				.10 .25	NO YES		14	
A 111	2				2.50 3.50	2.25 3.25				6B	11, 6 6	
A 111A	4		SHLD A111 E6	 54				.25 .25	YES NO			
A 111R			P1-95 S9-1-C	1 34				.10 .25	NO YES		14	
A 111Y			P1-81 S9-1-NO	1 34				.10 .25	NO YES		14	

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LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 112	4		P1-65 S9-2-NO	1 34				.10 .25	NO YES		14	
A 113	4		P1-77 S9-7-NO	1 35				.10 .25	NO YES		14	
A 114	4		P1-67 S9-8-C	1 35				.10 .25	NO YES		14	
A 115	4		P1-78 S20-2-C	1 32				.10 .25	NO YES		14	
A 116	4		P1-79 S21-3-C	1 33				.10 .25	NO YES		14	
A 117	1				2.50 4.50	2.25 4.25				6B	10, 12 12	
A 117A	4		SHLD A117 E6	 54				.25 .25	YES NO			
A 117Y			P1-68 S20-4-C	1 32				.10 .25	NO YES		14	
A 118	4		P1-93 S21-3-NO	1 33				.10 .25	NO YES		14	
A 119	4		P1-106 S20-2-NO	1 32				.10 .25	NO YES		14	
A 120	4		P1-85 S7-2-C	1 40				.10 .25	NO YES		14	
A 121	4		P1-86 S23-1-NO	1 41				.10 .25	NO YES		14	

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LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 122	4		P1-89 S7-2-NC	1 40				.10 .25	NO YES		14	
A 123	4		P1-97 S8-1-NO	1 42				.10 .25	NO YES		14	
A 124	4		P1-98 S7-1-C	1 40				.10 .25	NO YES		14	
A 125	4		P1-102 S23-1-NC	1 41				.10 .25	NO YES		14	
A 126	4		P1-103 S8-1-NC	1 42				.10 .25	NO YES		14	
A 127	4		P1-104 S7-1-NC	1 40				.10 .25	NO YES		14	
A 128	4		S7-1-NO S8-1-C	40 42				.25 .25	YES YES			
A 129	4		S7-2-NO S23-1-C	40 41				.25 .25	YES YES			
A 130	4		P1-16 S19-5-C	1 12				.10 .25	NO YES		14	
A 131	4		P1-17 S19-6-NO	1 15				.10 .25	NO YES		14	
A 132	4		P1-3 S19-5-NO	1 12				.10 .25	NO YES		14	
A 133	4		S19-5-C S19-6-C	12 16				.25 .25	YES YES			

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LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 134	4		P1-7 S19-4-C	1 11				.10 .25	NO YES		14	
A 135	4		P1-6 S19-4-NO	1 11				.10 .25	NO YES		14	
A 136	4		P1-20 S19-3-NO	1 17				.10 .25	NO YES		14	
A 137	4		S19-4-C S19-3-C	11 18				.25 .25	YES YES			
A 138	4		P1-5 S19-2-NO	1 9				.10 .25	NO YES		14	
A 139	4		P1-4 S19-1-NO	1 14				.10 .25	NO YES		14	
A 140	4		P1-18 S19-1-C	1 14A				.10 .25	NO YES		14	
A 141	4		S19-1-C S19-2-C	13 10				.25 .25	YES YES			
A 142	5		P1-91 E1	1 3				.10 .25	NO NO		14 18	
A 143	5		P1-83 E7	1 2				.10 .25	NO NO		14 11	
A 144	5		E6 E7	54 2				.25 .25	NO NO		11	
A 145	5		E5 E7	53 2				.25 .25	NO NO		11	

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LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 146	5		E4 E7	52 2				.25 .25	NO NO		11	
A 147	5		E3 E7	51 2				.25 .25	NO NO		11	
A 148	5		E2 E7	48 2				.25 .25	NO NO		11	
A 149	4		P1-40 S10-5	1 6				.10 .25	NO YES		14	
A 151	4		S17-1-C S1-2-NC	45 44				.25 .25	YES YES			
A 152	4		S11-3-NO S11-8-C	27 28				.25 .25	YES YES			
A 153	4		S20-1-C S9-4-NO	32 34				.25 .25	YES YES			
A 154	4		S9-8-NO S20-2-NC	35 32				.25 .25	YES YES			
A 155	4		S9-5-C S20-4-NC	35 32				.25 .25	YES YES			
A 156	4		S9-4-C S20-1-NC	34 32				.25 .25	YES YES			
A 157	4		S9-5-NO S20-3-C	35 32				.25 .25	YES YES			
A 158	4		S16-4-C S16-5-C	55 39				.25 .25	YES YES			

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LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 159	4		P1-14 S1-3-NC	1 44				.10 .25	NO YES		14	
A 160	4		P1-15 S1-3-C	1 44				.10 .25	NO YES		14	
A 161	4		T1-2 T1-3	22 22				.25 .25	YES YES			
A 162	4		S3-1-C S3-2-NC	47 47				.25 .25	YES YES			
A 163	4		S16-7-C S16-8-C	39 39				.25 .25	YES YES			
A 164	4		S16-3-C S16-2-C	55 55				.25 .25	YES YES			
A 165	4		S16-2-C S16-1-C	55 55				.25 .25	YES YES			
A 166	4		S15-1-NC S15-2-NO	29 29				.25 .25	YES YES			
A 167	4		S15-4-NC S15-5-NC	29 30				.25 .25	YES YES			
A 168	4		S15-3-NC S15-4-NO	29 29				.25 .25	YES YES			
A 169	4		S15-1-NO S15-3-NO	29 29				.25 .25	YES YES			
A 170	4		S15-1-NO S15-5-NO	29 30				.25 .25	YES YES			

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LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 171	4		S15-6-NO	30				.25	YES			
			S15-5-NO	30				.25	YES			
A 180	4		S17-1-C	45				.25	YES			
			S17-2-C	45				.25	YES			
A 181	4		R1-WIPER	46				.25	YES			
			R1-CW	46				.25	YES			
A 182	4		S10-4	6				.25	YES			
			S10-3	6				.25	YES			
A 183	4		S14-1-C	25				.25	YES			
			S14-2-NC	25				.25	YES			
A 184	4		S18-2-C	31				.25	YES			
			S18-1-C	31				.25	YES			
A 185	4		S21-3-NC	33				.25	YES			
			S20-2-NC	32				.25	YES			
A 186	4		S21-1-C	33				.25	YES			
			S20-1-C	32				.25	YES			
A 187	4		S9-4-NO	34				.25	YES			
			S9-8-NO	35				.25	YES			
A 188	4		S9-2-C	34				.25	YES			
			S9-7-C	35				.25	YES			
A 189	4		S9-1-C	34				.25	YES			
			S9-5-C	35				.25	YES			
A 190	4		S20-4-NC	32				.25	YES			
			S20-3-NC	32				.25	YES			

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LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 191	4		S20-3-NC	32				.25	YES			
			S21-4-NC	33				.25	YES			
A 192	4		S21-4-NC	33				.25	YES			
			S21-2-NC	33				.25	YES			
A 193	4		S9-8-C	35				.25	YES			
			S9-4-C	34				.25	YES			
A 194	4		S20-1-NC	32				.25	YES			
			S21-1-NC	33				.25	YES			
A 195	4		S9-1-NO	34				.25	YES			
			S9-5-NO	35				.25	YES			
A 196	4		S20-3-C	32				.25	YES			
			S21-4-C	33				.25	YES			
A 197	4		S20-4-C	32				.25	YES			
			S21-2-C	33				.25	YES			

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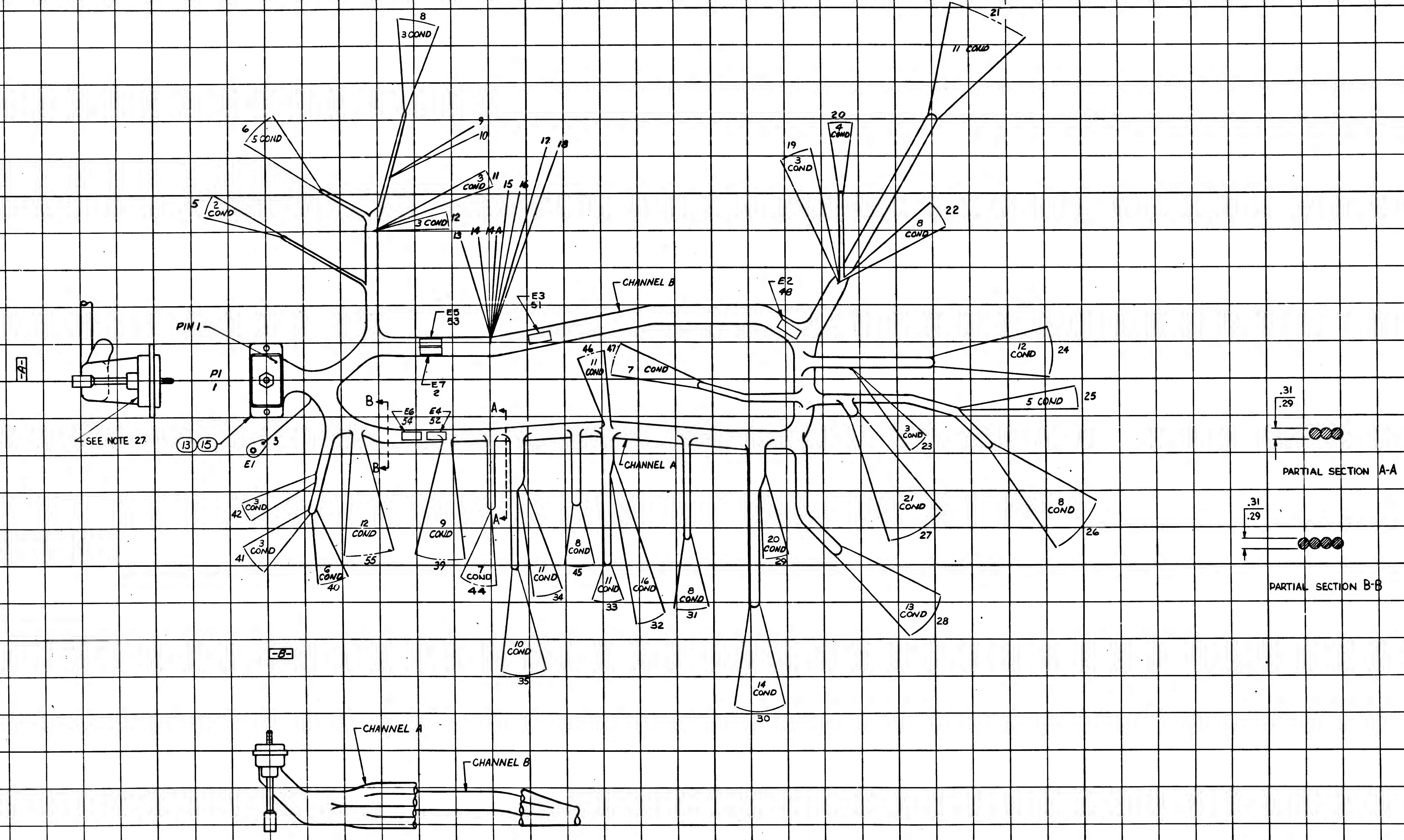
SIZE A
1023017
SCALE - NONE
REV LTR
+
SHEET 26 OF 27



1014578-041 | 1014513
NEXT ASSY | USED ON
APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS DECIMALS ANGLES
DO NOT SCALE THIS DRAWING
MATERIAL
CONTRACT NAS9-497

AC SPARK PLUG DIVISION, GMC
MILWAUKEE, WISCONSIN
ACSP PN
DRAWN E. Mollen DATE 8 APR 65
CHECKED Ed Foster 15 APR 65
APPROVAL D. W. Mickey 15 Apr 65
APPROVAL
NASA APPROVAL
MIT APPROVAL

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

WIRING HARNESS A

CODE IDENT NO. 80230
SIZE J
1023017
SCALE Full
SHEET 27 OF 27

1023017

TDRR 22049 AUG. 31 1965

APPLICATION	
NEXT ASSY	USED ON
1014664	1015023

REVISIONS			
SYM	DESCRIPTION	DATE	APPROVAL
A	REVISED PER D.O. 60765	14 JUL 65	MCR / WJ
B	INITIAL CLASS A RELEASE PER TDRR NO. 22049		

REV							
SHEET							
REV STATUS OF SHEETS	REV	B	B	B	B	B	B
	SHEET	1	2	3	4	5	6

REV B, SHEET 7

MIT INSTRUMENTATION LAB
CAMBRIDGE, MASS.
CONTRACT
DWG. NO.

DRAWN Ebbahen DATE 17 JUN 65
CHECKED C. Pisida 24 JUN 65
APPROVAL D.W. Mickey 24 JUN 65
&C Watson 24 AUG 65
APPROVAL 4 Allen 8/26/65
NASA APPROVAL 8/31/65
MIT APPROVAL W. Kupfer 3 Aug 65
CONTRACT NAS 9-497

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

WIRING HARNESS B
G&N INDICATOR
CONTROL PANEL

CODE IDENT NO. 80230
SIZE A
1023020
REV B
SCALE —
SHEET 1 OF 7

WIRING HARNESS B 1023020 A

NOTE NUMBER	GENERAL NOTES DESCRIPTION
1	NOTE ONE IS NOT APPLICABLE
2	INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327.
3	INSTALL CRIMP STYLE TERMINALS IN ACCORDANCE WITH ND1002206.
4	APPLY REFERENCE DESIGNATIONS TO SLEEVES PER ND 1002019 USING .10-.06 INCH HIGH CHARACTERS. POSITION AS SHOWN
5	PARTIAL REFERENCE DESIGNATIONS ARE SHOWN, FOR COMPLETE DESIGNATIONS PREFIX WITH 50A1.
6	IDENTIFY USING DRAWING NUMBER PER ND1002019.
7	SPOT TIE AS INDICATED USING ITEM 6.
8	GRID MODULE IS ONE INCH BASIC FOR DIMENSIONING. UNLESS OTHERWISE SPECIFIED HARNESS DRAWING IS SHOWN AT TRUE POSITION. CENTERS OF HARNESS FEATURES SHALL BE WITHIN +.25 OR -.25 AND ENDS OF LEADS AND ACCESSORIES +.12 OR -.12 INCH TOLERANCE OF THE TRUE POSITIONS SHOWN. ALL TOLLRANCES APPLY REGARDLESS OF FEATURE SIZE.
9	VENDOR ITEM - SEE SOURCE CONTROL OR SPECIFICATION CONTROL DRAWING.

MANNED SPACECRAFT CENTER HOUSTON, TEXAS
SIZE A
1023020
SCALE-NONE REV LTR A SHEET 2 OF 7

MIL 2084 4-63

WIRING HARNESS B 1023020 A

NOTE NUMBER GENERAL NOTES DESCRIPTION

TOLERANCE CHART, UNLESS OTHERWISE SPECIFIED ---

APPLICABLE LENGTH FOR STRIP WIRE, STRIP JACKET, CUT WIRE OR CUT SHIELD.	TOLERANCE STRIP WIRE	STRIP JACKET	CUT WIRE	CUT SHIELD
UNDER 1 INCH	+.03-.00	+.06-.06	+.06-.06	+.06-.06
1 INCH TO 6 INCHES	+.06-.00	+.25-.25	+.25-.25	+.25-.25
6 INCHES TO 6 FEET		+.50-.50	+.50-.50	+.50-.50

MANNED SPACECRAFT CENTER HOUSTON, TEXAS
SIZE A
1023020
SCALE-NONE REV LTR A SHEET 3 OF 7

MIL 2084 4-63

WIRING HARNESS B 1023020 A

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
B 1	1		E-S13 E2	6 5				.25 .25	NO NO		5, 2 7, 8	
B 2	1		E-S10 E2	4 5				.25 .25	NO NO		5, 2	
B 3	1		E-S19 E2	7 5				.25 .25	NO NO		3, 2	
B 4	1		E1 E3	1 3				.25 .25	NO NO		4, 2 7, 8	
B 5	1		E-S8 E3	23 3				.25 .25	NO NO		5, 2	
B 6	1		E-S16 E4	22 8				.25 .25	NO NO		4, 2 7, 8	
B 7	1		E-S9 E4	21 8				.25 .25	NO NO		5, 2	
B 8	1		E-S1 E4	9 8				.25 .25	NO NO		5, 2	
B 9	1		E-S20 E5	20 10				.25 .25	NO NO		5, 2 7, 8	
B 10	1		E-S18 E5	19 10				.25 .25	NO NO		5, 2	
B 11	1		E-S11 E6	17 18				.25 .25	NO NO		4, 2 7, 8	
B 12	1		E-S14 E6	16 18				.25 .25	NO NO		5, 2	

MANNED SPACECRAFT CENTER HOUSTON, TEXAS
SIZE A
1023020
SCALE-NONE REV LTR A SHEET 5 OF 7

MIL 2084 4-63

WIRING HARNESS B

LIST OF MATERIALS

SEE NOTE NUMBER	ITEM	QTY	PART NO.	DESCRIPTION
9	1	1	1010789-014	16 AWG WIRE, YELLOW, 10 FT TOTAL LENGTH
9	2	17	1012534- 45	INSULATION SLEEVING, HEAT SHRINK
9	3	2	MS20659-39	TERMINAL-LUG
9	4	4	MS20659-3	TERMINAL-LUG
9	5	11	1010987-001	TERMINAL-LUG
9	6	AR	1012507-001	LACING TAPE
9	7	6	1010945-3	SPLICE REDUCER
9	8	6	1012534-75	INSULATION SLEEVING, HEAT SHRINK

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS
SIZE A
1023020
SCALE-NONE
REV LTR A
SHEET 4 of 7

MIL 2084-4-64

WIRING HARNESS B
1023020 A

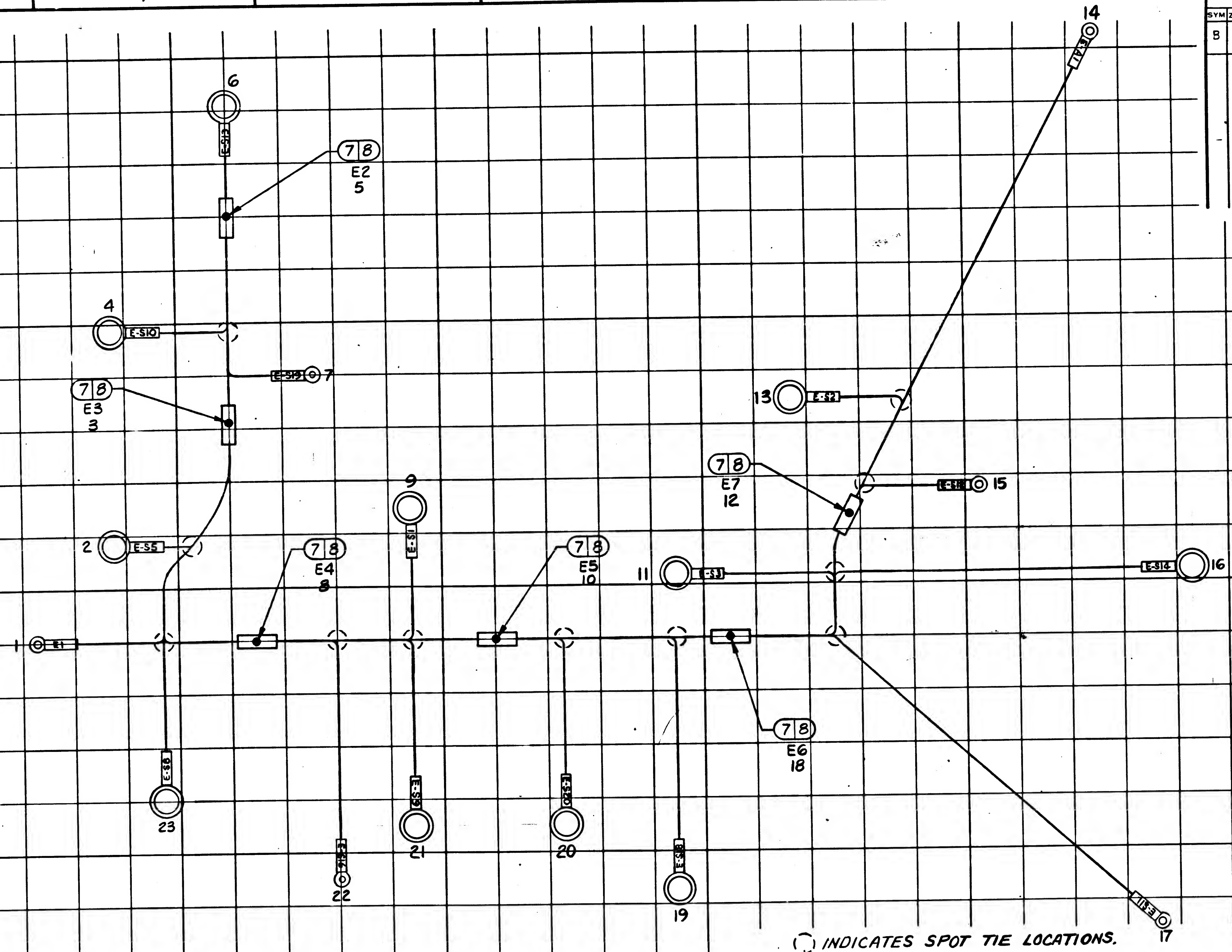
LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
B 13	1		E-S3 E6	11 18				.25 .25	NO NO		5, 2	
B 14	1		E-S12 E7	15 12				.25 .25	NO NO		4, 2 7, 8	
B 15	1		E-S2 E7	13 12				.25 .25	NO NO		5, 2	
B 16	1		E-S5 E3	2 3				.25 .25	NO NO		5, 2	
B 17	1		E-A1 E7	14 12				.25 .25	NO NO		3, 2	
B 18	1		E2 E3	5 3				.25 .25	NO NO			
B 19	1		E3 E4	3 8				.25 .25	NO NO			
B 20	1		E4 E5	8 10				.25 .25	NO NO			
B 21	1		E5 E6	10 18				.25 .25	NO NO			
B 22	1		E6 E7	18 12				.25 .25	NO NO			

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS
SIZE A
1023020
SCALE-NONE
REV LTR A
SHEET 6 OF 7

MIL 2084 4-63

1023020 B

REVISIONS TDRR 22049					
SYM	ZONE	DESCRIPTION	CHG NO.	DATE	APPD
B		INITIAL CLASS A RELEASE PER TDRR NO. 22049			



( ) INDICATES SPOT TIE LOCATIONS.

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS + — − DECIMALS + — − ANGLES + — −
DO NOT SCALE THIS DRAWING
MATERIAL —
CONTRACT NAS 9-497

MIT
INSTRUMENTATION LAB
CAMBRIDGE MASS
DRAWN R.J. Olson DATE 17 JUNE 65
CHECKED C. Piojda 24 JUN 65
APPROVAL D.W. Mickey 24 JUN 65
APPROVAL 2 AUG 65
NASA APPROVAL
MIT APPROVAL 3 Aug 65

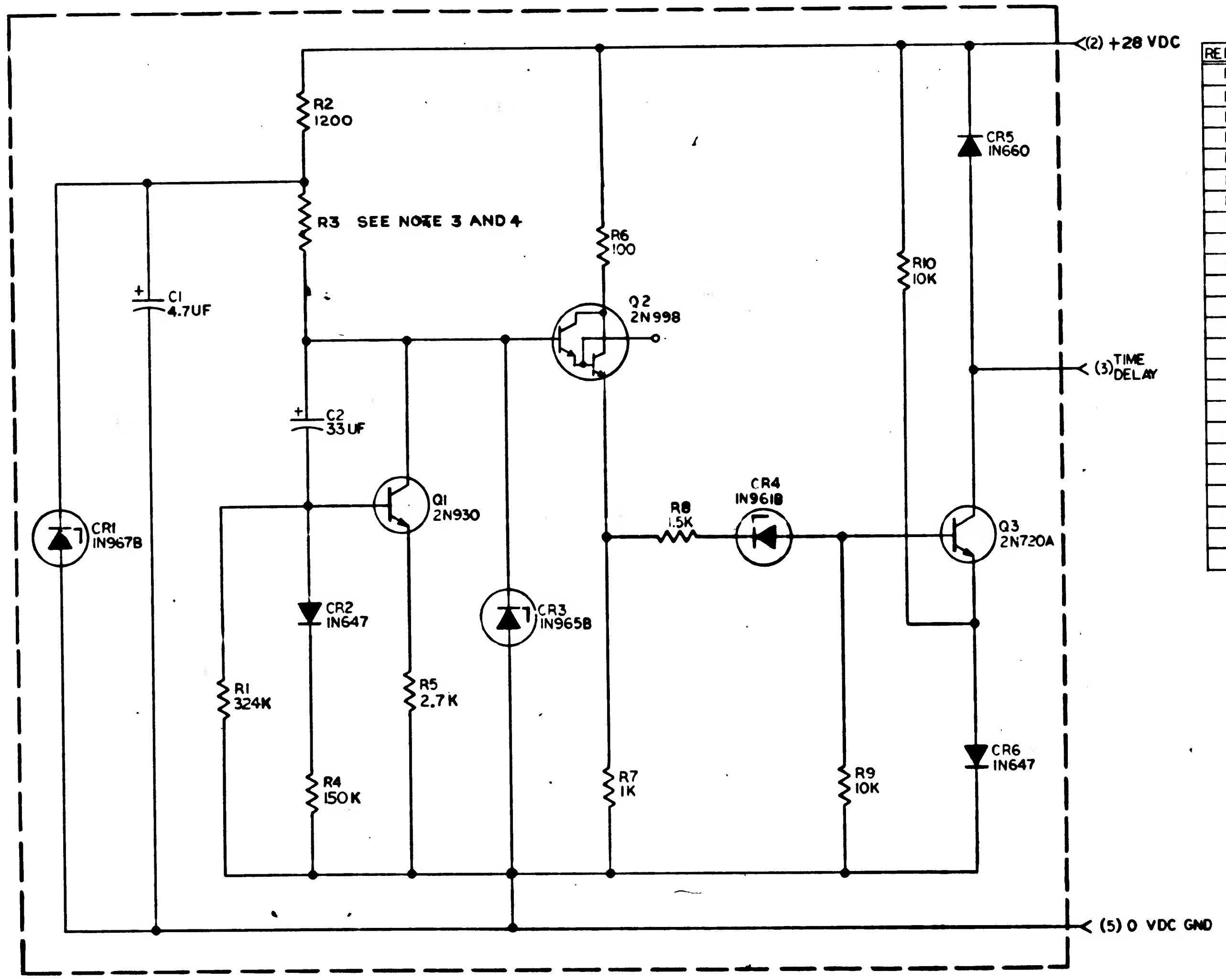
MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

WIRING HARNESS B
G&N INDICATOR
CONTROL PANEL

CODE IDENT NO. 80230
SIZE D
1023020
SCALE 1/1
SHEET 7 OF 7

NOTICE — WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER, AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS, OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO

REVISIONS 22361			
SYM	DESCRIPTION	DATE	APPROVAL



REF DES	PART NO.	DESCRIPTION	VALUE	TOL ±	RATING
R1	1010364-734	RESISTOR	324 K	1 %	1/8 W
R2	1006750-34		1200	2 %	1/4 W
R3	SEE NOTES 3&4				
R4	1006750-84		150K	2 %	1/4 W
R5	1006750-42		2.7K	2 %	1/4 W
R6	1006750-8		100	2 %	1/4 W
R7	1006750-32		1K	2 %	1/4 W
R8	1006750-36		1.5K	2 %	1/4 W
R9	1006750-56		10K	2 %	1/4 W
R10	1006750-56		10K	2 %	1/4 W
C1	1006755-77	CAPACITOR	4.7UF	10 %	35 V
C2	1006755-34	CAPACITOR	33UF	10 %	20 V
CR1	1010830-11	DIODE	IN967B	5 %	400MW
CR2	1010362-002		IN647		
CR3	1010830-9		IN965B	5 %	400MW
CR4	1010830-5		IN961B	5 %	400MW
CR5	1010385		IN660		250MW
CR6	1010362-002		IN647		
Q1	1010397-1	TRANSISTOR	2N930		
Q2	1010342		2N998		
Q3	1010357-1		2N720A		

CHART A	
R3 ±1% 1/8W	
PART NO	VALUE
1010364-652	121K
-654	124K
-656	127K
-658	130K
-660	133K
-662	137K
-664	140K
-666	143K
-668	147K
-670	150K
-672	154K
-674	158K
-676	162K
-678	165K
-680	169K
-682	174K
-684	178K
-686	182K
-688	187K
1010364-690	191K

CHART A (CONT)	
R3 ±1% 1/8W	
PART NO	VALUE
1010364-692	196K
-694	200K
-696	205K
-698	210K
-700	215K
-702	221K
-704	226K
-706	232K
-708	237K
-710	243K
-712	249K
-714	255K
-716	261K
-718	267K
-720	274K
-722	280K
-724	287K
-726	294K
-728	301K
1010364-730	309K

CHART A (CONT)	
R3 ±1% 1/8W.	
PART NO	VALUE
1010364-732	316K
-734	324K
-736	332K
-738	340K
-740	348K
-742	357K
-744	365K
-746	374K
-748	383K
-750	392K
-752	402K
-754	412K
-756	422K
-758	432K
-760	442K
-762	453K
-764	464K
1010364-766	475K

REF
TIME DELAY ASSY
DWG NO. 1015038-021

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. UNLESS OTHERWISE SPECIFIED RESISTOR VALUES ARE IN OHMS
3. SELECT TO GIVE 100±3 SECOND TIME DELAY
4. VALUE OF R3 TO BE SELECTED AT FINAL TEST FROM CHART A

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.
LIST OF MATERIALS			

NEXT ASSY	USED ON
1015065-041	1015023-031
1015065-031	8102604
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± — DECIMALS ± — ANGLES ± —
DO NOT SCALE THIS DRAWING
MATERIAL —
HEAT TREATMENT —
FINAL FINISH —

MIT
INSTRUMENTATION LAB
CAMBRIDGE, MASS.
DWG NO CONTRACT
DRAWN Frank R. Walker DATE 17 JUN 65
CHECKED C. Pizzola 22 JUN 65
APPROVAL D. Cushman 8 SEP'65
APPROVAL 9/7/65
~~NASA APPROVAL~~ NOT REQUIRED PER LETTER
NASA PP7-65-612
MIT APPROVAL 9 Sept 65

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

SCHEMATIC,
TIME DELAY

CODE IDENT NO.	SIZE	NASA DRAWING NO
80230	D	1023022

SCALE — WT — SHEET 1 OF 1

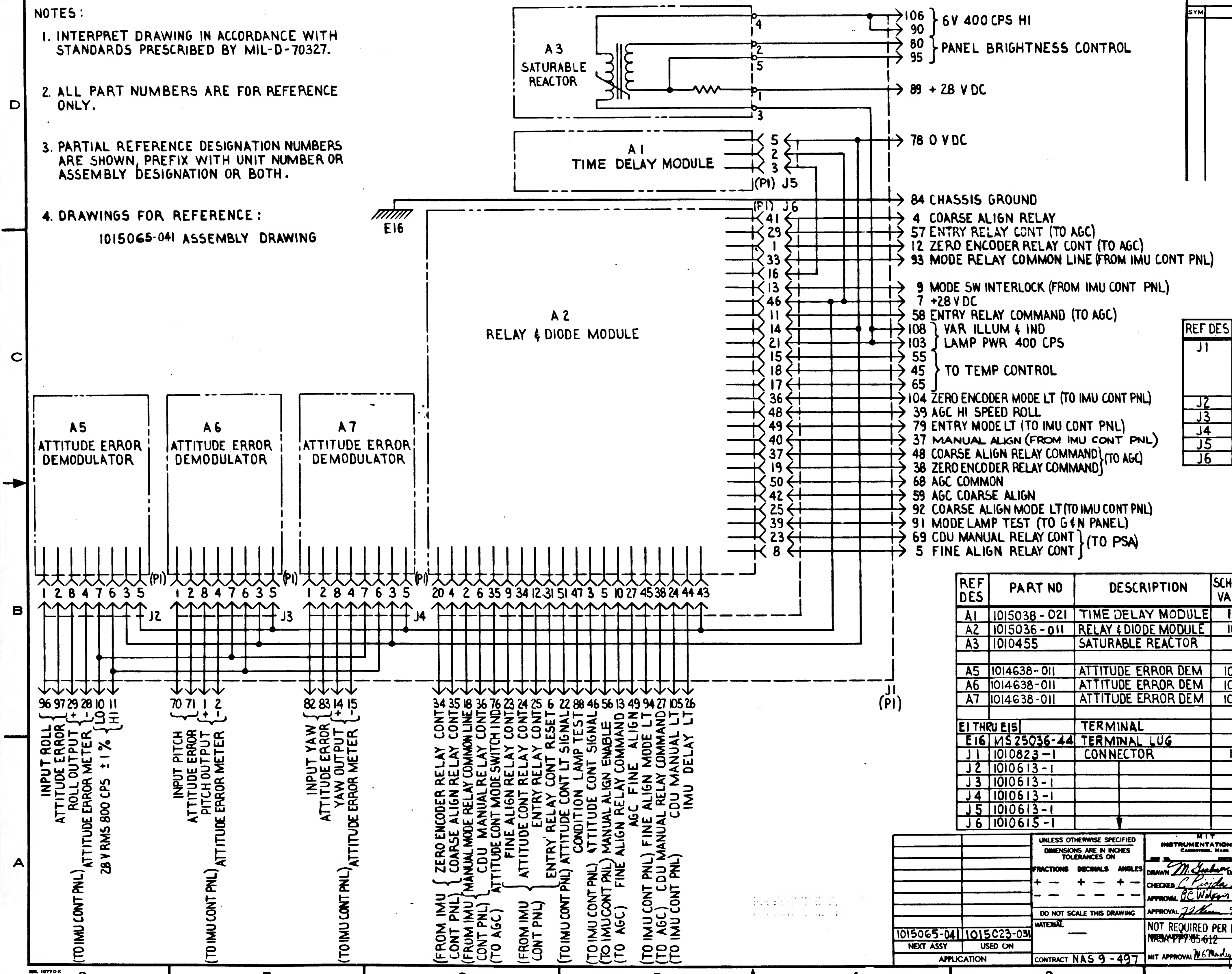
1023024

REVISIONS 22361

SYM	DESCRIPTION	DATE	APPD.

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327.
2. ALL PART NUMBERS ARE FOR REFERENCE ONLY.
3. PARTIAL REFERENCE DESIGNATION NUMBERS ARE SHOWN, PREFIX WITH UNIT NUMBER OR ASSEMBLY DESIGNATION OR BOTH.
4. DRAWINGS FOR REFERENCE:
   1015065-041 ASSEMBLY DRAWING



UNUSED TERMINALS

REF DES	TERMINAL NUMBER
J1	3,8,16,17,19,20,21,30,31,32,33,40,41,42,43,44,47,50,51,52,53,54,60,61,62,63,64,66,67,72,73,74,75,77,81,85,86,87,98,99,100,101,102,107
J2	9
J3	9
J4	9
J5	1,4,6,7,8,9
J6	7,22,26,28,30,32

REF DES	PART NO	DESCRIPTION	SCHEMATIC DIAGRAM OR VALUE, TOL & RATING
A1	1015038-021	TIME DELAY MODULE	1023022
A2	1015036-011	RELAY & DIODE MODULE	1014623
A3	1010455	SATURABLE REACTOR	
A5	1014638-011	ATTITUDE ERROR DEM	1014637
A6	1014638-011	ATTITUDE ERROR DEM	1014637
A7	1014638-011	ATTITUDE ERROR DEM	1014637
E1 THRU E15		TERMINAL	
E16	MS25036-44	TERMINAL LUG	
J1	1010823-1	CONNECTOR	108 CONTACTS
J2	1010613-1		9
J3	1010613-1		9
J4	1010613-1		9
J5	1010613-1		9
J6	1010615-1		51

NEXT ASSY	USED ON
1015065-041	1015023-031

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS DECIMALS ANGLES
± ± ±
DO NOT SCALE THIS DRAWING
MATERIAL —
CONTRACT NAS 9-497

MIT
INSTRUMENTATION LAB
CAMBRIDGE, MASS
DRAWN M. Graham DATE 21-JUN-65
CHECKED C. Piojda 22 JUN 65
APPROVAL BC Wolfgang 8 Sept 65
APPROVAL 9/2/65
NOT REQUIRED PER LETTER ~~NASA APPROVAL~~ NASA-PP7-65-612
MIT APPROVAL M G Mardy 9 Sept 65

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

D & C ELECTRONICS
SCHEMATIC DIAGRAM

CODE IDENT NO. 80230
SIZE D
1023024
SCALE NONE
SHEET 1 OF 1

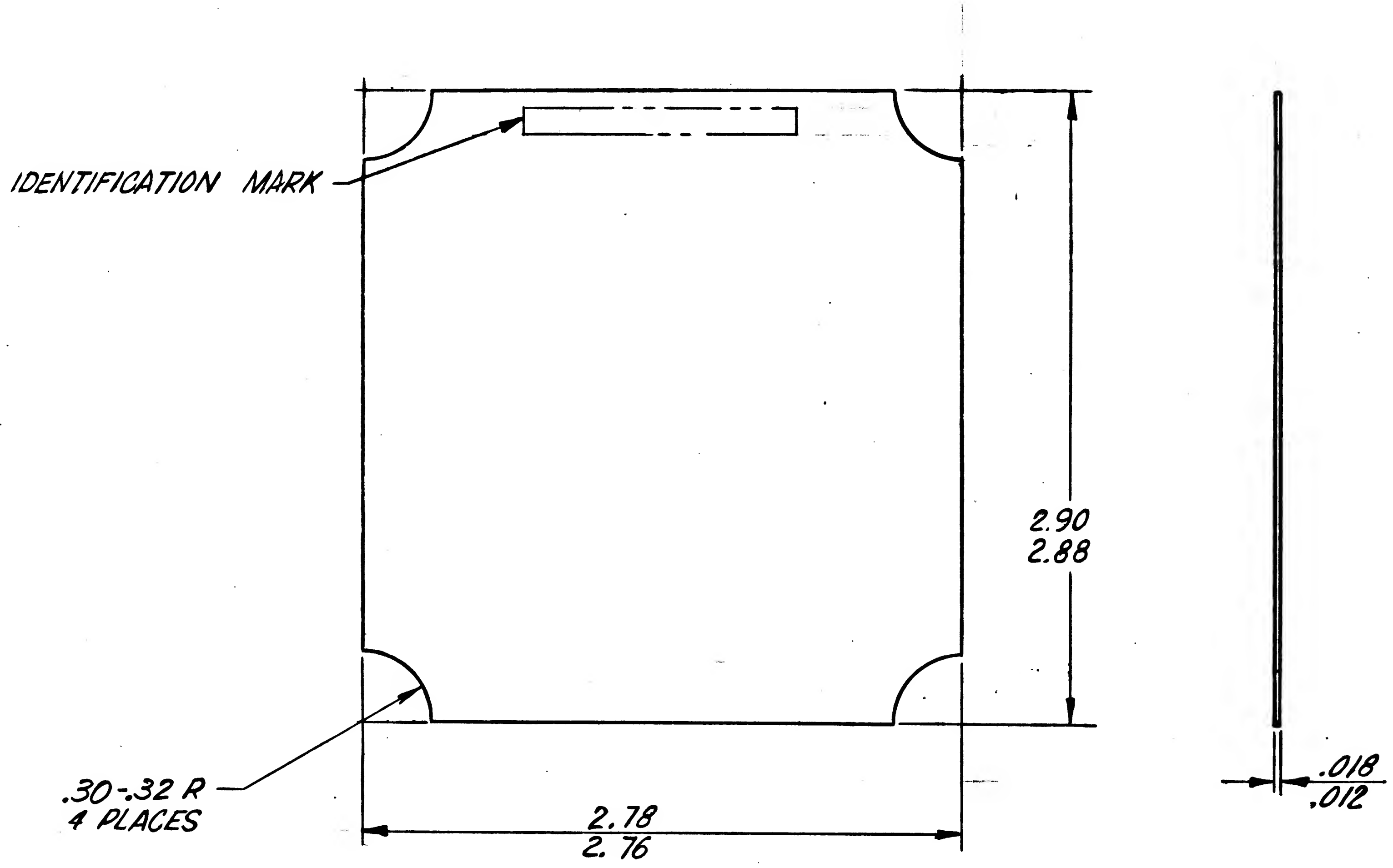
MIL 1077 D-K

REVISIONS TDRR 25110

SYM	ZONE	DESCRIPTION	CHG NO.	DATE	APPD.

NOTES

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327.
2. MATERIAL:
   GLASS EPOXY PER MIL-P-18177, TYPE GEE
3. IDENTIFY PER ND 1002019



1023036-011	1015065-051
NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON

FRACTIONS	DECIMALS	ANGLES
+ −	± .005	+
− −	−	−

DO NOT SCALE THIS DRAWING

MATERIAL SEE NOTE 2

CONTRACT NAS 9-497

MIT
INSTRUMENTATION LAB
CAMBRIDGE, MASS.

DRAWN LeRoy Lewandowski DATE 11-8-65
CHECKED 2 DEC 65
APPROVAL Paul Watson JAN 3 66
APPROVAL 1/3/66
NASA APPROVAL A. C. METZGER
MIT APPROVAL 10 Jan 66
Charleston 6 DEC 65

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

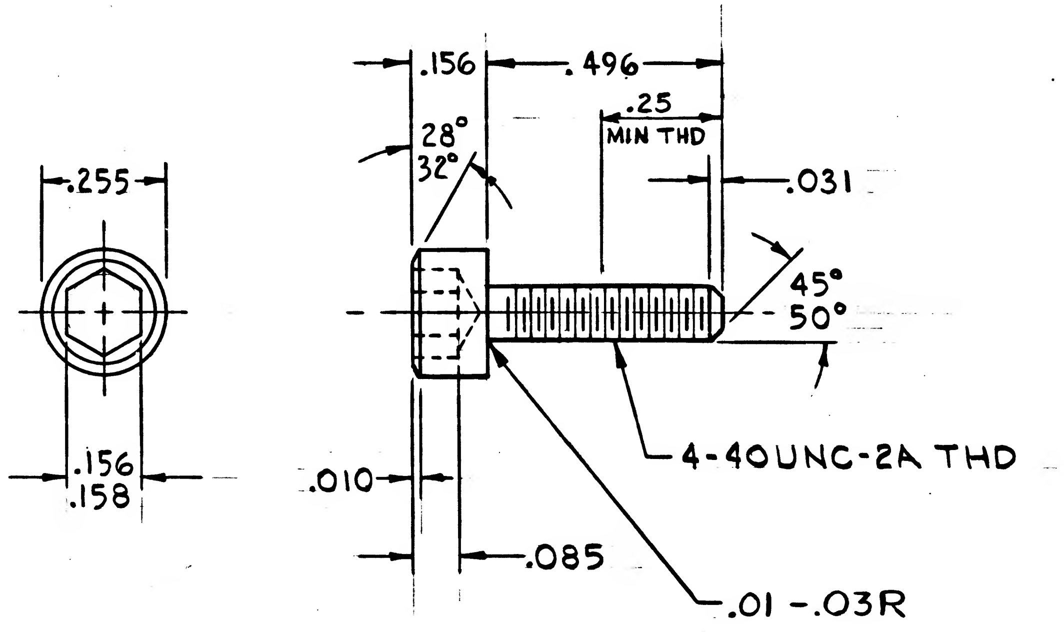
INSULATOR, PLATE TOP,
RELAY AND DIODE MODULE

CODE IDENT NO. 80230
SIZE C
1023031
SCALE 2:1
SHEET 1 OF 1

MIL 1077C—P

REVISIONS TDRR 25110					
SYM	ZONE	DESCRIPTION	CHG NO.	DATE	APPD.

NOTES:
1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327.
2. MATERIAL: STAINLESS STEEL QQ-S-763, CLASS 303, COND A.
3. FINISH: PASSIVATE PER MIL-F-14072, E300.
4. UNLESS OTHERWISE SPECIFIED:
   A. 125/ ALL OVER.
   B. ALL CORNERS MUST BE .005 TO .015 R OR CHAMFER.
5. IDENTIFY PER ND1002019.



1015065-051	
NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS + − DECIMALS ±.005 ANGLES + −
DO NOT SCALE THIS DRAWING
MATERIAL SEE NOTE 2
CONTRACT NAS9-497

MIT
INSTRUMENTATION LAB
CAMBRIDGE, MASS.
DWG. NO. CONTRACT
DRAWN RW Heinl DATE 15 NOV 65
CHECKED Hayles 16 DEC 65
APPROVAL Paul Watson JAN 3 66
APPROVAL 1/3/66
NASA APPROVAL A. C. METZGER
MIT APPROVAL 10 Jan 66
Charleston 16 DEC 65

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

SCREW, SOCKET HEAD
SPECIAL

CODE IDENT NO. 80230
SIZE C
1023032
SCALE 4:1
SHEET 1 OF 1

MIL 1077C—P

NOTICE — WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

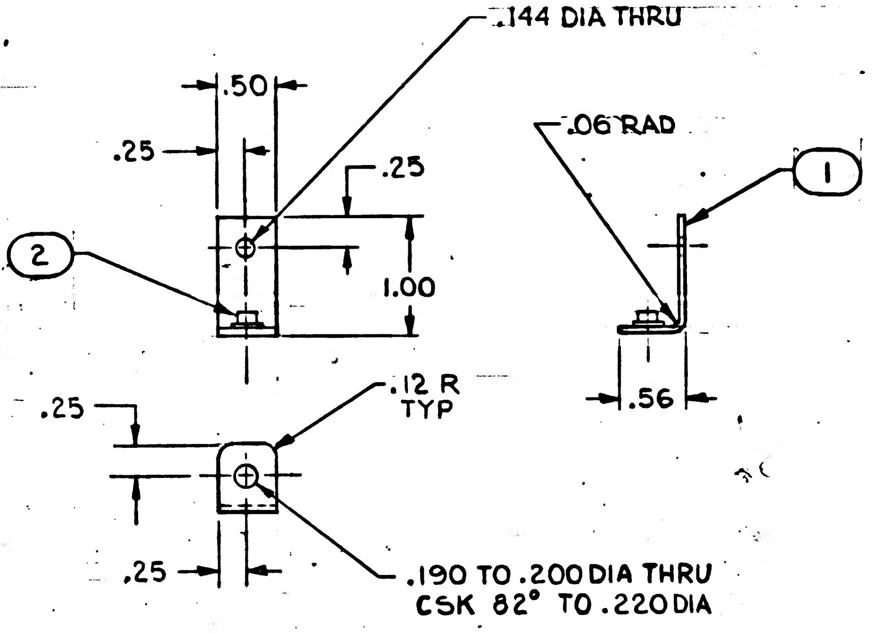
1744

REVISIONS

SYM	ZONE	DESCRIPTION	DR	CHK	DATE	APPROVED
		INITIAL CLASS A RELEASE TDRR NO.				

NOTES:

1. INTERPRET DRAWING PER MIL-D-70327.
2. MATERIAL FOR ITEM 1: .062 THK AL ALLOY SHEET, 5052-H32 PER QQ-A-250/8.
3. GENERAL MACHINING STANDARDS PER ND1002078.
4. SURFACE ROUGHNESS: 125√ ALL OVER.
5. FINISH: CLEAR ANODIZE PER MIL-A-8625, TYPE I.
6. IDENTIFY USING DWG NO. AND MFG SYM PER ND1002019.



ITEM NO.	QTY REQD	PART OR IDENTIFYING NO.	MATERIAL OR NOTES	NOMENCLATURE OR DESCRIPTION
2	1	1000076-8		NUT, CLINCH
1	1	1023042-1		CLIP
	011	LIST OF MATERIALS		

1023040-011	1015023-021
NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
CAPACITOR VALUES ARE IN μf
RESISTOR VALUES ARE IN OHMS
TOLERANCES ON
2 PLACE DECIMALS ±.016 3 PLACE DECIMALS ±.005 ANGLES ± —
DO NOT SCALE THIS DRAWING

MATERIAL
SEE NOTE 2

MIT
INSTRUMENTATION LAB
CAMBRIDGE, MASS.

DRAWN R. Rotka MAR 8 65
CHECKED 9 MAR 65
APPROVED 3/9/65
APPROVED BC Watson 3/9/65
APPROVED MIT 11 Mar 65
APPROVED MSC 3/1/65
DATE

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

CLIP ASSY

CODE IDENT NO.
SIZE C
DRAWING NO. 1023042
SCALE 1 : 1
SHEET 1 OF 1

MASTER

APPLICATION		REVISIONS			
NEXT ASSY	USED ON	SYM	DESCRIPTION	DATE	APPROVAL
1014606-041		A	INITIAL RELEASE CLASS A PER TDRR 26127	13 JAN 66	WK BM

REV	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
SHEET	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46
REV STATUS REV							A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
OF SHEETS SHEET							1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20

AC SPARK PLUG DIVISION, GMC
MILWAUKEE, WISCONSIN

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

ACSP PN
DRAWN L Krahn DATE 21 OCT 65
CHECKED N.E. Abrahamson FEB 8 66
APPROVAL G C Watson FEB 8, 66
APPROVAL A J Kleiss 2/9/66
NASA APPROVAL A. C. METZGER
MIT APPROVAL W Tuller 10 FEB 66
CONTRACT NAS 9-497

WIRING HARNESS "A" AGE INTERCONNECT

CODE IDENT NO. 99974
SIZE
1023055
REV +
SCALE
SHEET 1 OF 120

REVISION STATUS OF SHEETS

SH	REV	SH	REV	SH	REV
47	A	81	A	115	A
48	A	82	A	116	A
49	A	83	A	117	A
50	A	84	A	118	A
51	A	85	A	119	A
52	A	86	A	120	A
53	A	87	A		
54	A	88	A		
55	A	89	A		
56	A	90	A		
57	A	91	A		
58	A	92	A		
59	A	93	A		
60	A	94	A		
61	A	95	A		
62	A	96	A		
63	A	97	A		
64	A	98	A		
65	A	99	A		
66	A	100	A		
67	A	101	A		
68	A	102	A		
69	A	103	A		
70	A	104	A		
71	A	105	A		
72	A	106	A		
73	A	107	A		
74	A	108	A		
75	A	109	A		
76	A	110	A		
77	A	111	A		
78	A	112	A		
79	A	113	A		
80	A	114	A		

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NOTE NUMBER	GENERAL NOTES DESCRIPTION
1	NOT APPLICABLE
3	INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327.
4	MARK LEAD IDENTIFICATION PER ND1002019.
5	MARK LEAD IDENTIFICATION ON SINGLE CONDUCTORS PER ND1002019 OMITTING ALL SUFFIX LETTERS EXCEPT A AND B. SUFFIX LETTERS ON SINGLE LEAD INDICATE TWISTING ONLY.
6	SPACING OF LEAD IDENTIFICATION MARKING SHALL BE EVERY 1.2 INCHES
7	SPIRALLING OF THE MARKING IS ALLOWED.
8	MARK SLEEVING OF MULTI-LEADS WITH THE LEADS NUMBER .12 INCH HIGH, COLOR BLACK, PER ND1002019
13	LENGTHS SPECIFIED ARE FOR LEADS BEFORE ATTACHING TO AN ACCESSORY.
14	LEAD LENGTHS ARE FOR MFG REFERENCE ONLY.
15	A LETTER WITH AN ASTERISK SUFFIX INDICATES A LOWER CASE LETTER.
17	LACE HARNESS PER ND1002032 USING ITEM 51.
18	LEADS LISTED WITH AN A OR B IN THE DETAIL COLUMN ARE TO BE ASSEMBLED PER DETAIL A OR B AS SHOWN ON THE CONFIGURATION DRAWING (1014606 REF).
19	SOLDER PER MIL-S-6872 (ES2505-1) USING ITEMS 50 AND 58, OR 44.

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NOTE NUMBER	GENERAL NOTES DESCRIPTION
20	THE SUFFIX LETTER OF A LEAD IDENTIFICATION NUMBER INDICATES LEAD SHIELDING, COLOR, MARKING OR TWISTING A - FROM END SHIELD B - TO END SHIELD G - GREEN K - BLACK L - BLUE N - BROWN R - RED W - WHITE Y - YELLOW
21	ASSEMBLE HARNESS AS SHOWN PER CONFIGURATION DRAWING (1014606 REF).
22	SERIALIZE PER ND1002023.
23	VENDOR ITEM - SEE SPECIFICATION CONTROL DRAWING
24	VENDOR ITEM - SEE SOURCE CONTROL DRAWING.

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NOTE NUMBER

GENERAL NOTES

DESCRIPTION

TOLERANCE CHART, UNLESS OTHERWISE SPECIFIED ---

APPLICABLE LENGTH FOR STRIP WIRE, STRIP JACKET, CUT WIRE OR CUT SHIELD.	TOLERANCE			
	STRIP WIRE	STRIP JACKET	CUT WIRE	CUT SHIELD
UNDER 1 INCH	+.03-.00	+.06-.06	+.06-.06	+.06-.06
1 INCH TO 6 INCHES	+.06-.00	+.25-.25	+.25-.25	+.25-.25
6 INCHES TO 6 FEET		+.50-.50	+.50-.50	+.50-.50

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LIST OF MATERIALS

SEE NOTE NUMBER	ITEM	QTY	PART NO.	DESCRIPTION
	1	1	1023055-001	WIRE PER 1010789-011 YEL JKT 24AWG YEL 13 FEET 0.0 INCHES TOTAL LENGTH
	2	1	1023055-002	WIRE PER 1010789-012 YEL JKT 24AWG YEL, RED 376 FEET 11.0 INCHES TOTAL LENGTH
	3	1	1023055-003	WIRE PER 1010789-013 YEL JKT 24AWG YEL, RED, GREEN 30 FEET 4.0 INCHES TOTAL LENGTH
	4	1	1023055-004	WIRE PER 1010789-001 24AWG YELLOW 878 FEET 11.0 INCHES TOTAL LENGTH
	5	1	1023055-005	WIRE PER 1010789-006 22AWG YELLOW 138 FEET 9.0 INCHES TOTAL LENGTH
	6	1	1023055-006	WIRE PER 1010707-1 (3 COND TWISTED SHIELDED) 26 FEET 6.0 INCHES TOTAL LENGTH
23	7	3	1010411- 1	CONNECTOR RECP ELECTRICAL
23	8	5	1010411- 2	CONNECTOR RECP ELECTRICAL
23	9	1	1010607- 1	CONNECTOR RECP ELECTRICAL
23	10	2	1010607- 3	CONNECTOR RECP ELECTRICAL
23	11	1	1010642-144	CONNECTOR RECP ELECTRICAL
23	12	1	1010642-244	CONNECTOR RECP ELECTRICAL
23	13	1	1010348- 1	CONNECTOR PLUG ELECTRICAL
23	14	1	1010348- 2	CONNECTOR PLUG ELECTRICAL
23	17	1	1010674- 1	CONNECTOR PLUG ELECTRICAL

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LIST OF MATERIALS

SEE NOTE NUMBER	ITEM	QTY	PART NO.	DESCRIPTION
23	18	1	1010674- 2	CONNECTOR PLUG ELECTRICAL
23	19	1	1010674- 3	CONNECTOR PLUG ELECTRICAL
23	20	1	1010674- 4	CONNECTOR PLUG ELECTRICAL
23	27	16	1010402- 1	SLEEVE, SOLDER
23	28	137	1010402- 2	SLEEVE, SOLDER
23	31	249	1010490-110	INSULATION-SLEEVING, ELECTRICAL, HEAT SHRINKABLE (WHITE)
23	32	316	1010490-112	INSULATION-SLEEVING, ELECTRICAL, HEAT SHRINKABLE (WHITE)
23	38	1	1010490-975	INSULATION-SLEEVING, ELECTRICAL, HEAT SHRINKABLE (WHITE) 36 INCHES TOTAL LENGTH
23	39	1	1010490-979	INSULATION-SLEEVING, ELECTRICAL, HEAT SHRINKABLE (WHITE) 36 INCHES TOTAL LENGTH
23	40	2	1010490-216	INSULATION-SLEEVING, ELECTRICAL, HEAT SHRINKABLE (WHITE)
23	41	2	1010490-222	INSULATION-SLEEVING, ELECTRICAL, HEAT SHRINKABLE (WHITE)
	42	1	1023055-007	WIRE, BRAID PER QQ-B-575 (COPPER, TIN-COATED, TUBLAR) SIZE 3/8 ID, 36 GAUGE, 36 INCHES TOTAL LENGTH
	43	1	1023055-008	WIRE, BRAID PER QQ-B-575 (COPPER, TIN-COATED, TUBLAR) SIZE 1/2 ID, 36 GAUGE, 36 INCHES TOTAL LENGTH

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LIST OF MATERIALS

SEE NOTE NUMBER	ITEM	QTY	PART NO.	DESCRIPTION
23	45	1	1000243- 34	FERRULE, INNER ELECTRICAL CONDUCTOR
23	46	1	1000243- 26	FERRULE, INNER ELECTRICAL CONDUCTOR
23	47	1	1000242- 30	FERRULE, OUTER ELECTRICAL CONDUCTOR
23	49	1638	1010738- 6	CONTACT, SOCKET
24	51	AR	1012507-004	TAPE, LACING AND TYING
	52	REF		CONTACT SOCKETS SUPPLIED WITH 1010348
	53	REF		CONTACT SOCKETS SUPPLIED WITH 1010671
	54	REF		CONTACT SOCKETS SUPPLIED WITH 1021714
23	59	1	1000242- 24	FERRULE, OUTER ELECTRICAL CONDUCTOR
23	60	1	1000243- 30	FERRULE, INNER ELECTRICAL CONDUCTOR
23	61	1	1000242- 27	FERRULE, OUTER ELECTRICAL CONDUCTOR
23	62	1	1000243- 36	FERRULE, INNER ELECTRICAL CONDUCTOR
23	63	1	1000242- 33	FERRULE, OUTER ELECTRICAL CONDUCTOR
23	64	263	1010743- 1	WRAPOST RECEPTACLE
23	65	136	1010743- 2	WRAPOST RECEPTACLE
23	66	84	1010743- 3	WRAPOST RECEPTACLE
23	67	1	1010734- 16	GROMMET, CONNECTOR STRAIN RELIEF
23	68	1	1010734- 18	GROMMET, CONNECTOR STRAIN RELIEF

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LIST OF MATERIALS

SEE NOTE NUMBER	ITEM	QTY	PART NO.	DESCRIPTION
23	69	12	1010770- 2	CONTACT SOCKET
23	70	1	1010809-001	CONNECTOR, PLUG ELECTRICAL
	71	1	1021714-001	CONNECTOR, PLUG ELECTRICAL
	72	1	1021714-002	CONNECTOR, PLUG ELECTRICAL
	73	1	1023055-009	WIRE PER 1010789-008 22AWG YELLOW, RED 10 FEET 3.0 INCHES TOTAL LENGTH
	74	1	1023055-010	WIRE PER 1010789-009 22AWG YEL, RED, GREEN 54.0 INCHES TOTAL LENGTH
	75	1	1023055-011	WIRE PER 1010789-010 22AWG YEL, RED, GREEN BROWN 16 FT 1.0 IN. TOTAL LENGTH
	76	1	1023055-012	WIRE PER 1010789-002 24AWG BLACK 119 FEET 0.0 INCHES TOTAL LENGTH
	77	1	1023055-013	WIRE PER 1010789-003 24AWG YEL, RED , 420 FEET 0.0 INCHES TOTAL LENGTH
	78	1	1023055-014	WIRE PER 1010789-004 24AWG YEL, RED, GREEN 86 FEET 4.0 INCHES TOTAL LENGTH
	79	1	1023055-015	WIRE PER 1010789-005 24AWG YELLOW, RED GREEN, BROWN 15 FT 5.0 IN. TOTAL LENGTH
23	80	1	1010824- 5	CONNECTOR RECP ELECTRICAL
	81	1	1015902- 3	LUG TERMINAL

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	LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A	1	77	39.00									32 32	
A	1R			56P1-80 56TB2-A2					.10 .20	NO NO		49	
A	1Y			56P1-95 56TB2-A1					.10 .20	NO NO		49	
A	2	4	48.00	56P1-65 56TB3-L1					.10 .20	NO NO		49	
A	3	4	38.00	56P1-38 56TB1-K4					.10 .20	NO NO		49	
A	4	4	38.00	56P1-48 56TB1-K3					.10 .20	NO NO		49	
A	5	4	38.00	56P1-13 56TB1-K5					.10 .20	NO NO		49	
A	6	4	38.00	56P1-27 56TB1-K8					.10 .20	NO NO		49	
A	7	4	38.00	56P1-58 56TB1-K6					.10 .20	NO NO		49	
A	8	4	39.00	56P1-12 56TB2-B2					.10 .20	NO NO		49 64	
A	9	4	39.00	56P1-57 56TB2-R4					.10 .20	NO NO		49 64	
A	10	4	39.00	56P1-5 56TB2-C1					.10 .20	NO NO		49 64	

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	LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A	11	4	39.00	56P1-69 56TB2-B1					.10 .20	NO NO		49 64	
A	12	4	48.00	56P1-24 56TB3-F4					.10 .20	NO NO		49	
A	13	2	39.00			3.00 2.50	2.75 2.25					31 31, 28	
A	13B	76	12.00	56TB2-D3 SHLD A13					.20 .20	NO NO			
A	13R			56E61 56TB2-F3					.20 .20	NO NO		28	
A	13Y			56P1-68 56TB2-D2				2.00	.10 .20	NO NO		49	
A	14	2	51.00			3.00 1.00	2.75 .75					31 31, 28	
A	14B	76	12.00	56E44 SHLD A14					.20 .20	NO NO		28	
A	14R			56E61 56J21-155					.20 .10	NO NO		 49	
A	14Y			56P1-59 56J21-154				2.00	.10 .10	NO NO		49 49	
A	15	2	51.00			3.00 1.00	2.75 .75					31 31, 28	
A	15B	76	12.00	56E44 SHLD A15					.20 .20	NO NO			

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	LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A	15R			56E61 56J21-223					.20 .10	NO NO		 49	
A	15Y			56P1-49 56J21-222				2.00	.10 .10	NO NO		49 49	
A	16	2	51.00			3.00 1.00	2.75 .75					31 31, 28	
A	16B	76	12.00	56E44 SHLD A16					.20 .20	NO NO			
A	16R			56E61 56J21-227					.20 .10	NO NO		 49	
A	16Y			56P1-39 56J21-226				2.00	.10 .10	NO NO		49 49	
A	18	4	38.00	56P1-91 56TB1-K1					.10 .20	NO NO		49	
A	19	77	39.00									32 32	
A	19R			56P1-11 56TB2-G4					.10 .20	NO NO		49	
A	19Y			56P1-10 56TB2-H4					.10 .20	NO NO		49	
A	20	4	39.00	56P1-78 56TB2-M4					.10 .20	NO NO		49	
A	21	4	48.00	56P1-7 56TB3-S21					.10 .20	NO NO		49	

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LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 22	4	38.00	56P1-26 56TB1-U2					.10 .20	NO NO		49	
A 23	2	39.00			1.00 2.50	.75 2.25					31 31, 28	
A 23B	76	12.00	56TB2-S2 SHLD A23					.20 .20	NO NO			
A 23R			56P1-96 56TB2-N2					.10 .20	NO NO		49	
A 23Y			56P1-97 56TB2-R2					.10 .20	NO NO		49	
A 24	2	39.00			1.00 2.50	.75 2.25					31 31, 28	
A 24B	76	12.00	56TB2-F2 SHLD A24					.20 .20	NO NO			
A 24R			56P1-70 56TB2-H2					.10 .20	NO NO		49	
A 24Y			56P1-71 56TB2-G2					.10 .20	NO NO		49	
A 25	2	39.00			1.00 2.50	.75 2.25					31 31, 28	
A 25B	76	12.00	56TB2-F7 SHLD A25					.20 .20	NO NO			
A 25R			56P1-82 56TB2-H7					.10 .20	NO NO		49	

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LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 25Y			56P1-83 56TB2-G7					.10 .20	NO NO		49	
A 26	4	38.00	56P1-4 56TB1-D6					.10 .20	NO NO		49 64	
A 27	2	39.00			3.00 1.00	2.75 .75					31 31, 28	
A 27B	76	12.00	56E44 SHLD A27					.20 .20	NO NO			
A 27R			56E61 56J21-225					.20 .10	NO NO		 49	
A 27Y			56P1-76 56J21-224				2.00	.10 .10	NO NO		49 49	
A 28	4	48.00	56P1-88 56TB3-F3					.10 .20	NO NO		49	
A 29	4	48.00	56P1-89 56TB3-M21					.10 .20	NO NO		49 64	
A 30	4	39.00	56P1-37 56TB2-C2					.10 .20	NO NO		49	
A 31	4	48.00	56P1-45 56TB3-M2					.10 .20	NO NO		49 64	
A 32	4	48.00	56P1-55 56TB3-L2					.10 .20	NO NO		49 64	
A 33	4	48.00	56P1-84 56TB3-B20					.10 .20	NO NO		49	

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LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 38	77	38.00									32 32	
A 38R	4		56J1-67 56TB2-H3					.10 .20	NO NO		49 64	
A 38Y	4		56J1-57 56TB2-G3					.10 .20	NO NO		49 64	
A 39	2	38.00			1.00 2.50	.75 2.25					31 31, 28	
A 39B	76	12.00	56TB2-F2 SHLD A39					.20 .20	NO NO			
A 39R			56J1-35 56TB2-H2					.10 .20	NO NO		49	
A 39Y			56J1-45 56TB2-G2					.10 .20	NO NO		49	
A 40	2	47.00			1.00 2.50	.75 2.25					31 31, 28	
A 40B	76	12.00	56TB3-H14 SHLD A40					.20 .20	NO NO			
A 40R			56J1-20 56TB3-F14					.10 .20	NO NO		49	
A 40Y			56J1-6 56TB3-F13					.10 .20	NO NO		49	
A 41	2	47.00			1.00 2.50	.75 2.25					31 31, 28	

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LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 41B	76	12.00	56TB3-H13 SHLD A41					.20 .20	NO NO			
A 41R			56J1-21 56TB3-D13					.10 .20	NO NO		49	
A 41Y			56J1-7 56TB3-D14					.10 .20	NO NO		49	
A 42	2	38.00			1.00 2.50	.75 2.25					31 31, 28	
A 42B	76	12.00	56TB2-G1 SHLD A42					.20 .20	NO NO		65	
A 42R			56J1-104 56TB2-H1					.10 .20	NO NO		49 64	
A 42Y			56J1-90 56TB2-G1					.10 .20	NO NO		49	
A 43	2	38.00			1.00 2.50	.75 2.25					31 31, 28	
A 43B	76	12.00	56TB2-V6 SHLD A43					.20 .20	NO NO			
A 43R			56J1-100 56TB2-W6					.10 .20	NO NO		49	
A 43Y			56J1-86 56TB2-W7					.10 .20	NO NO		49 64	
A 44	2	38.00			1.00 2.50	.75 2.25					31 31, 28	

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LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 44B	76	12.00	56TB2-D8 SHLD A44					.20 .20	NO NO		65	
A 44R			56J1-101 56TB2-B8					.10 .20	NO NO		49	
A 44Y			56J1-87 56TB2-C8					.10 .20	NO NO		49 64	
A 45	3	38.00			1.00 2.50	.75 2.25					31 31, 28	
A 45B	76	12.00	56TB2-A5 SHLD A45					.20 .20	NO NO		65	
A 45G			56J1-108 56TB2-C5					.10 .20	NO NO		49 64	
A 45R			56J1-94 56TB2-A5					.10 .20	NO NO		49	
A 45Y			56J1-107 56TB2-B5					.10 .20	NO NO		49 64	
A 46	77	12.00									32 32	
A 46R			56J1-50 56E4					.10 .20	NO NO		49 27	
A 46Y			56J1-60 56E3					.10 .20	NO NO		49 27	
A 48	4	12.00	56J1-16 56E6					.10 .20	NO NO		49 27	

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LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 50	4	12.00	56J1-15 56E8					.10 .20	NO NO		49 27	
A 51	3	38.00			1.00 2.50	.75 2.25					31 31, 28	
A 51B	76	12.00	56TB2-T7 SHLD A51					.20 .20	NO NO		65	
A 51G			56J1-105 56TB2-T6					.10 .20	NO NO		49 64	
A 51R			56J1-106 56TB2-U6					.10 .20	NO NO		49 64	
A 51Y			56J1-92 56TB2-T7					.10 .20	NO NO		49	
A 52	78	38.00									32 32	
A 52G			56J1-31 56TB2-L5					.10 .20	NO NO		49 64	
A 52R			56J1-43 56TB2-K4					.10 .20	NO NO		49	
A 52Y			56J1-32 56TB2-L6					.10 .20	NO NO		49 64	
A 53	77	12.00									32 32	
A 53R			56J1-28 56E9					.10 .20	NO NO		49 28	

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LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 53Y			56J1-29 56E10					.10 .20	NO NO		49 28	
A 54	4	12.00	56J1-41 56E12					.10 .20	NO NO		49 28	
A 55	4	38.00	56J1-34 56TB2-W1					.10 .20	NO NO		49 64	
A 56	4	38.00	56J1-30 56TB2-N5					.10 .20	NO NO		49 64	
A 62	77	37.00									32 32	
A 62R			56J2-67 56TB2-H6					.10 .20	NO NO		49 64	
A 62Y			56J2-57 56TB2-G6					.10 .20	NO NO		49 64	
A 63	2	37.00			1.00 2.50	.75 2.25					31 31, 28	
A 63B	76	12.00	56TB2-F7 SHLD A63					.20 .20	NO NO			
A 63R			56J2-35 56TB2-H7					.10 .20	NO NO		49	
A 63Y			56J2-45 56TB2-G7					.10 .20	NO NO		49	
A 64	2	46.00			1.00 2.50	.75 2.25					31 31, 28	

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LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 64B	76	12.00	56E48 SHLD A64					.20 .20	NO NO		27	
A 64R			56J2-20 56TB3-N20					.10 .20	NO NO		49	
A 64Y			56J2-6 56TB3-N21					.10 .20	NO NO		49	
A 65	2	46.00			1.00 2.50	.75 2.25					31 31, 28	
A 65B	76	12.00	56TB3-H12 SHLD A65					.20 .20	NO NO			
A 65R			56J2-21 56TB3-C13					.10 .20	NO NO		49	
A 65Y			56J2-7 56TB3-C14					.10 .20	NO NO		49	
A 66	2	37.00			1.00 2.50	.75 2.25					31 31, 28	
A 66B	76	12.00	56TB2-G8 SHLD A66					.20 .20	NO NO		65	
A 66R			56J2-104 56TB2-H8					.10 .20	NO NO		49 64	
A 66Y			56J2-90 56TB2-G8					.10 .20	NO NO		49	
A 67	2	37.00			1.00 2.50	.75 2.25					31 31, 28	

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LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 67B	76	12.00	56TB2-V5 SHLD A67					.20 .20	NO NO			
A 67R			56J2-100 56TB2-U5					.10 .20	NO NO		49	
A 67Y			56J2-86 56TB2-U4					.10 .20	NO NO		49 64	
A 68	2	37.00			1.00 2.50	.75 2.25					31 31, 28	
A 68B	76	12.00	56TB2-D7 SHLD A68					.20 .20	NO NO			
A 68R			56J2-101 56TB2-B7					.10 .20	NO NO		49	
A 68Y			56J2-87 56TB2-C7					.10 .20	NO NO		49 64	
A 69	3	37.00			1.00 2.50	.75 2.25					31 31, 28	
A 69B	76	12.00	56TB2-C6 SHLD A69					.20 .20	NO NO		65	
A 69G			56J2-108 56TB2-A6					.10 .20	NO NO		49 64	
A 69R			56J2-94 56TB2-C6					.10 .20	NO NO		49	
A 69Y			56J2-107 56TB2-B6					.10 .20	NO NO		49 64	

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 70	77	12.00									32 32	
A 70R			56J2-50 56E4					.10 .20	NO NO		49	
A 70Y			56J2-60 56E3					.10 .20	NO NO		49	
A 72	4	12.00	56J2-16 56E6					.10 .20	NO NO		49	
A 74	4	12.00	56J2-15 56E8					.10 .20	NO NO		49	
A 75	3	37.00			1.00 2.50	.75 2.25					31 31, 28	
A 75B	76	12.00	56TB2-X6 SHLD A75					.20 .20	NO NO		65	
A 75G			56J2-105 56TB2-X5					.10 .20	NO NO		49 64	
A 75R			56J2-106 56TB2-W5					.10 .20	NO NO		49 64	
A 75Y			56J2-92 56TB2-X6					.10 .20	NO NO		49	
A 76	78	37.00									32 32	
A 76G			56J2-31 56TB2-L3					.10 .20	NO NO		49 64	

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 76R			56J2-43 56TB2-K4					.10 .20	NO NO		49	
A 76Y			56J2-32 56TB2-K3					.10 .20	NO NO		49 64	
A 77	77	12.00									32 32	
A 77R			56J2-28 56E9					.10 .20	NO NO		49	
A 77Y			56J2-29 56E10					.10 .20	NO NO		49	
A 78	4	12.00	56J2-41 56E12					.10 .20	NO NO		49	
A 79	4	37.00	56J2-34 56TB2-X1					.10 .20	NO NO		49 64	
A 80	4	37.00	56J2-30 56TB2-R5					.10 .20	NO NO		49 64	
A 84	77	12.00									32 32	
A 84R			56J3-1 56E1					.10 .20	NO NO		49	
A 84Y			56J3-14 56E2					.10 .20	NO NO		49	
A 85	77	38.00									32 32	

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 85R			56J3-67 56TB2-N1					.10 .20	NO NO		49 64	
A 85Y			56J3-57 56TB2-R1					.10 .20	NO NO		49 64	
A 86	2	38.00			1.00 2.50	.75 2.25					31 31, 28	
A 86B	76	12.00	56TB2-S2 SHLD A86					.20 .20	NO NO			
A 86R			56J3-35 56TB2-N2					.10 .20	NO NO		49	
A 86Y			56J3-45 56TB2-R2					.10 .20	NO NO		49	
A 87	2	38.00			1.00 2.50	.75 2.25					31 31, 28	
A 87B	76	12.00	56TB2-M8 SHLD A87					.20 .20	NO NO			
A 87R			56J3-20 56TB2-R8					.10 .20	NO NO		49 64	
A 87Y			56J3-6 56TB2-N7					.10 .20	NO NO		49	
A 88	2	38.00			1.00 2.50	.75 2.25					31 31, 28	
A 88B	76	12.00	56TB2-V8 SHLD A88					.20 .20	NO NO			

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LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM.JKT AREA NO.	STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 88R			56J3-21 56TB2-T8					.10 .20	NO NO		49 64	
A 88Y			56J3-7 56TB2-U8					.10 .20	NO NO		49	
A 89	2	38.00			1.00 2.50	.75 2.25					31 31, 28	
A 89B	76	12.00	56TB2-S3 SHLD A89					.20 .20	NO NO			
A 89R			56J3-104 56TB2-N3					.10 .20	NO NO		49	
A 89Y			56J3-90 56TB2-R3					.10 .20	NO NO		49	
A 90	2	38.00			1.00 2.50	.75 2.25					31 31, 28	
A 90B	76	12.00	56TB2-V4 SHLD A90					.20 .20	NO NO		65	
A 90R			56J3-100 56TB2-W4					.10 .20	NO NO		49	
A 90Y			56J3-86 56TB2-X4					.10 .20	NO NO		49 64	
A 91	2	38.00			1.00 2.50	.75 2.25					31 31, 28	
A 91B	76	12.00	56TB2-V2 SHLD A91					.20 .20	NO NO			

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LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM.JKT AREA NO.	STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 91R			56J3-101 56TB2-W2					.10 .20	NO NO		49	
A 91Y			56J3-87 56TB2-X2					.10 .20	NO NO		49 64	
A 92	3	38.00			1.00 2.50	.75 2.25					31 31, 28	
A 92B	76	12.00	56TB2-A4 SHLD A92					.20 .20	NO NO		65	
A 92G			56J3-108 56TB2-C4					.10 .20	NO NO		49 64	
A 92R			56J3-94 56TB2-A4					.10 .20	NO NO		49	
A 92Y			56J3-107 56TB2-B4					.10 .20	NO NO		49 64	
A 93	77	12.00									32 32	
A 93R			56J3-50 56E4					.10 .20	NO NO		49	
A 93Y			56J3-60 56E3					.10 .20	NO NO		49	
A 96	3	38.00			1.00 2.50	.75 2.25					31 31, 28	
A 96B	76	12.00	56TB2-R7 SHLD A96					.20 .20	NO NO		65	

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LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM.JKT AREA NO.	STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 96G			56J3-105 56TB2-R6					.10 .20	NO NO		49 64	
A 96R			56J3-106 56TB2-N6					.10 .20	NO NO		49 64	
A 96Y			56J3-92 56TB2-R7					.10 .20	NO NO		49	
A 97	78	38.00									32 32	
A 97G			56J3-31 56TB2-K6					.10 .20	NO NO		49 64	
A 97R			56J3-43 56TB2-K4					.10 .20	NO NO		49 66	
A 97Y			56J3-32 56TB2-K5					.10 .20	NO NO		49 64	
A 98	77	12.00									32 32	
A 98R			56J3-28 56E9					.10 .20	NO NO		49	
A 98Y	4	12.00	56J3-29 56E10					.10 .20	NO NO		49	
A 99	4	12.00	56J3-41 56E12					.10 .20	NO NO		49	
A 100	4	38.00	56J3-34 56TB2-S1					.10 .20	NO NO		49 64	

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LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM.JKT AREA NO.	STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 101	4	38.00	56J3-89 56TB2-T1					.10 .20	NO NO		49 64	
A 102	4	38.00	56J3-30 56TB2-K8					.10 .20	NO NO		49 64	
A 104	77	12.00									32 32	
A 104R	4	12.00	56J4-1 56E14					.10 .20	NO NO		49 28	
A 104Y	4	12.00	56J4-14 56E13					.10 .20	NO NO		49 28	
A 107	2	48.00			1.00 2.50	.75 2.25					31 31, 28	
A 107B	76	12.00	56TB3-H9 SHLD A107					.20 .20	NO NO			
A 107R			56J4-57 56TB3-K11					.10 .20	NO NO		49	
A 107Y			56J4-67 56TB3-K10					.10 .20	NO NO		49	
A 108	2	48.00			1.00 2.50	.75 2.25					31 31, 28	
A 108B	76	12.00	56TB3-N15 SHLD A108					.20 .20	NO NO		64	
A 1C8R			56J4-66 56TB3-N13					.10 .20	NO NO		49	

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LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 1C8Y			56J4-56 56TB3-N14					.10 .20	NO NO		49	
A 109	78	48.00									32 32	
A 109G			56J4-34 56TB3-T12					.10 .20	NO NO		49 64	
A 109R			56J4-45 56TB3-R12					.10 .20	NO NO		49 64	
A 109Y			56J4-35 56TB3-S12					.10 .20	NO NO		49 64	
A 110	2	48.00			1.00 2.50	.75 2.25					31 31, 28	
A 110B	76	12.00	56TB3-K9 SHLD A110					.20 .20	NO NO			
A 110R			56J4-6 56TB3-K7					.10 .20	NO NO		49 64	
A 110Y			56J4-20 56TB3-K8					.10 .20	NO NO		49 64	
A 111	2	48.00			1.00 2.50	.75 2.25					31 31, 28	
A 111B	76	12.00	56TB3-G15 SHLD A111					.20 .20	NO NO		64	
A 111R			56J4-7 56TB3-G13					.10 .20	NO NO		49 64	

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LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 111Y			56J4-21 56TB3-G14					.10 .20	NO NO		49 64	
A 112	2	48.00			1.00 2.50	.75 2.25					31 31, 28	
A 112B	76	12.00	56TB3-H9 SHLD A112					.20 .20	NO NO			
A 112R			56J4-104 56TB3-H10					.10 .20	NO NO		49 64	
A 112Y			56J4-90 56TB3-H11					.10 .20	NO NO		49 64	
A 113	4	48.00	56J4-89 56TB3-M18					.10 .20	NO NO		49 64	
A 114	2	48.00			1.00 2.50	.75 2.25					31 31, 28	
A 114B	76	12.00	56TB3-N9 SHLD A114					.20 .20	NO NO			
A 114R			56J4-100 56TB3-N7					.10 .20	NO NO		49 64	
A 114Y			56J4-86 56TB3-N8					.10 .20	NO NO		49 64	
A 115	2	48.00			1.00 2.50	.75 2.25					31 31, 28	
A 115B	76	12.00	56TB3-N9 SHLD A115					.20 .20	NO NO		65	

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LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 115R			56J4-101 56TB3-N11					.10 .20	NO NO		49 64	
A 115Y			56J4-87 56TB3-N10					.10 .20	NO NO		49 64	
A 116	3	48.00			1.00 2.50	.75 2.25					31 31, 28	
A 116B	76	12.00	56TB3-S5 SHLD A116					.20 .20	NO NO		65	
A 116G			56J4-108 56TB3-S4					.10 .20	NO NO		49 64	
A 116R			56J4-94 56TB3-S5					.10 .20	NO NO		49	
A 116Y			56J4-107 56TB3-S6					.10 .20	NO NO		49 64	
A 117	77	12.00									32 32	
A 117R			56J4-50 56E17					.10 .20	NO NO		49 27	
A 117Y			56J4-60 56E16					.10 .20	NO NO		49 27	
A 121	2	48.00			1.00 2.50	.75 2.25					31 31, 28	
A 121B	76	12.00	56TB3-L9 SHLD A121					.20 .20	NO NO			

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LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 121R			56J4-106 56TB3-L7					.10 .20	NO NO		49 64	
A 121Y			56J4-92 56TB3-L8					.10 .20	NO NO		49 64	
A 122	78	48.00									32 32	
A 122G			56J4-31 56TB3-D11					.10 .20	NO NO		49 64	
A 122R			56J4-43 56TB3-B17					.10 .18	NO NO		49 65	
A 122Y			56J4-32 56TB3-C11					.10 .20	NO NO		49 64	
A 123	77	12.00									32 32	
A 123R	4		56J4-28 56E9					.10 .20	NO NO		49	
A 123Y	4	12.00	56J4-29 56E10					.10 .20	NO NO		49	
A 124	4	12.00	56J4-41 56E12					.10 .20	NO NO		49	
A 130	2	50.00			1.00 2.50	.75 2.25					31 31, 28	
A 130B	76	12.00	56TB3-G9 SHLD A130					.20 .20	NO NO			

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LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 130R			56J5-8 56TB3-G10					.10 .20	NO NO		49	
A 130Y			56J5-22 56TB3-F10					.10 .20	NO NO		49	
A 131	2	50.00			1.00 2.50	.75 2.25					31 31, 28	
A 131B	76	12.00	56TB3-K15 SHLD A131					.20 .20	NO NO		66	
A 131R			56J5-9 56TB3-F16					.10 .20	NO NO		49	
A 131Y			56J5-10 56TB3-G16					.10 .20	NO NO		49	
A 132	2	50.00			3.00 2.50	2.75 2.25					31 31, 28	
A 132B	76	12.00	56TB3-L9 SHLD A132					.20 .20	NO NO		65	
A 132R			56J5-12 56TB3-L10				2.00	.10 .20	NO NO		49 64	
A 132Y			56E18 56TB3-L11					.20 .20	NO NO		27 64	
A 133	4	12.00	56J5-11 56E18					.10 .20	NO NO		49	
A 134	2	50.00			1.00 2.50	.75 2.25					31 31, 28	

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LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 134B	76	12.00	56TB3-R15 SHLD A134					.20 .20	NO NO			
A 134R			56J5-68 56TB3-R14					.10 .20	NO NO		49 64	
A 134Y			56J5-67 56TB3-R13					.10 .20	NO NO		49 64	
A 135	2	50.00			1.00 2.50	.75 2.25					31 31, 28	
A 135B	76	12.00	56TB3-H9 SHLD A135					.20 .20	NO NO		66	
A 135R			56J5-104 56TB3-H8					.10 .20	NO NO		49 64	
A 135Y			56J5-90 56TB3-H7					.10 .20	NO NO		49 64	
A 136	4	50.00	56J5-89 56TB3-N18					.10 .20	NO NO		49 64	
A 137	2	50.00			1.00 2.50	.75 2.25					31 31, 28	
A 137B	76	12.00	56TB3-T9 SHLD A137					.20 .20	NO NO			
A 137R			56J5-100 56TB3-T11					.10 .20	NO NO		49 64	
A 137Y			56J5-86 56TB3-T10					.10 .20	NO NO		49 64	

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LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 138	2	50.00			1.00 2.50	.75 2.25					31 31, 28	
A 138B	76	12.00	56TB3-S9 SHLD A138					.20 .20	NO NO			
A 138R			56J5-101 56TB3-S11					.10 .20	NO NO		49 64	
A 138Y			56J5-87 56TB3-S10					.10 .20	NO NO		49 64	
A 139	3	50.00			1.00 2.50	.75 2.25					31 31, 28	
A 139B	76	12.00	56TB3-T5 SHLD A139					.20 .20	NO NO		65	
A 139G			56J5-108 56TB3-T6					.10 .20	NO NO		49 64	
A 139R			56J5-94 56TB3-T5					.10 .20	NO NO		49	
A 139Y			56J5-107 56TB3-T4					.10 .20	NO NO		49 64	
A 144	2	50.00			1.00 2.50	.75 2.25					31 31, 28	
A 144B	76	12.00	56TB3-M9 SHLD A144					.20 .20	NO NO			
A 144R			56J5-106 56TB3-M8					.10 .20	NO NO		49 64	

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LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 144Y			56J5-92 56TB3-M7					.10 .20	NO NO		49 64	
A 145	78	50.00									32 32	
A 145G			56J5-31 56TB3-D12					.10 .20	NO NO		49 64	
A 145R			56J5-43 56TB3-B16					.10 .18	NO NO		49 65	
A 145Y			56J5-32 56TB3-C12					.10 .20	NO NO		49 64	
A 146	77	12.00									32 32	
A 146R			56J5-28 56E9					.10 .20	NO NO		49	
A 146Y			56J5-29 56E10					.10 .20	NO NO		49	
A 147	4	12.00	56J5-41 56E12					.10 .20	NO NO		49	
A 148	77	50.00									32 32	
A 148R			56J5-56 56TB3-L12					.10 .20	NO NO		49 64	
A 148Y			56J5-66 56TB3-K12					.10 .20	NO NO		49 64	

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LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 149	4	12.00	56J5-25 56E18					.10 .20	NO NO		49	
A 150	77	80.00									32 32	
A 150R			56J6-1 56P1-1					.10 .10	NO NO		49 49	
A 150Y			56J6-2 56P1-2					.10 .10	NO NO		49 49	
A 151	77	80.00									32 32	
A 151R			56J6-14 56P1-14					.10 .10	NO NO		49 49	
A 151Y	4	80.00	56J6-15 56P1-15					.10 .10	NO NO		49 49	
A 152	77	80.00									32 32	
A 152R			56J6-29 56P1-29					.10 .10	NO NO		49 49	
A 152Y			56J6-28 56P1-28					.10 .10	NO NO		49 49	
A 153	77	51.00									32 32	
A 153R			56J6-108 56TB1-S1					.10 .20	NO NO		49	

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SCALE-NONE
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LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 153Y			56J6-107 56TB1-S2					.10 .20	NO NO		49	
A 154	4	51.00	56J6-12 56TB1-K7					.10 .20	NO NO		49	
A 155	2	56.00			3.00 2.50	2.75 2.25					31 31, 28	
A 155B	76	12.00	56TB2-D3 SHLD A155					.20 .20	NO NO		65	
A 155R			56E55 56TB2-F3					.20 .20	NO NO		27 65	
A 155Y			56J6-68 56TB2-D2				2.00	.10 .20	NO NO		49 65	
A 156	2	68.00			3.00 1.00	2.75 .75					31 31, 28	
A 156B	76	12.00	56E44 SHLD A156					.20 .20	NO NO			
A 156R			56E55 56J21-229					.20 .10	NO NO		 49	
A 156Y			56J6-69 56J21-228				2.00	.10 .10	NO NO		49 49	
A 157	4	80.00	56J6-18 56P1-18					.10 .10	NO NO		49 49	
A 158	4	51.00	56J6-81 56TB1-F8					.10 .20	NO NO		49	

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LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 159	4	56.00	56J6-37 56TB2-C2					.10 .20	NO NO		49 65	
A 160	4	80.00	56J6-9 56P1-9					.10 .10	NO NO		49 49	
A 161	4	80.00	56J6-6 56P1-6					.10 .10	NO NO		49 49	
A 162	4	80.00	56J6-34 56P1-34					.10 .10	NO NO		49 49	
A 163	4	80.00	56J6-35 56P1-35					.10 .10	NO NO		49 49	
A 164	4	80.00	56J6-36 56P1-36					.10 .10	NO NO		49 49	
A 165	4	80.00	56J6-23 56P1-23					.10 .10	NO NO		49 49	
A 166	4	66.00	56J6-24 56TB3-F4					.10 .20	NO NO		49 65	
A 167	4	80.00	56J6-25 56P1-25					.10 .10	NO NO		49 49	
A 168	4	80.00	56J6-93 56P1-93					.10 .10	NO NO		49 49	
A 169	4	56.00	56J6-78 56TB2-L4					.10 .20	NO NO		49	
A 170	4	80.00	56J6-56 56P1-56					.10 .10	NO NO		49 49	

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LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 171	4	80.00	56J6-104 56P1-104					.10 .10	NO NO		49 49	
A 172	4	80.00	56J6-92 56P1-92					.10 .10	NO NO		49 49	
A 173	4	80.00	56J6-105 56P1-105					.10 .10	NO NO		49 49	
A 174	4	80.00	56J6-94 56P1-94					.10 .10	NO NO		49 49	
A 175	4	80.00	56J6-22 56P1-22					.10 .10	NO NO		49 49	
A 176	4	80.00	56J6-79 56P1-79					.10 .10	NO NO		49 49	
A 177	4	80.00	56J6-46 56P1-46					.10 .10	NO NO		49 49	
A 178	4	66.00	56J6-91 56TB3-B21					.10 .20	NO NO		49	
A 179	4	50.00	56J8-67 56TB1-G1					.10 .20	NO NO		49	
A 181	4	65.00	56J8-66 56TB3-H6					.10 .20	NO NO		49	
A 182	77	65.00									32 32	
A 182R			56J8-68 56TB3-B13					.10 .20	NO NO		49	

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LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 182Y			56J8-81 56TB3-B12					.10 .20	NO NO		49	
A 183	4	55.00	56J8-106 56TB2-S6					.10 .20	NO NO		49	
A 184	4	55.00	56J8-78 56TB2-S7					.10 .20	NO NO		49	
A 185	4	55.00	56J8-93 56TB2-S4					.10 .20	NO NO		49	
A 186	4	55.00	56J8-79 56TB2-S5					.10 .20	NO NO		49	
A 187	4	50.00	56J8-51 56TB1-H8					.10 .20	NO NO		49	
A 188	4	65.00	56J8-60 56TB3-M6					.10 .20	NO NO		49	
A 189	4	12.00	56J8-61 56E20					.10 .20	NO NO		49 28	
A 190	4	65.00	56J8-73 56TB3-B5					.10 .20	NO NO		49	
A 191	4	12.00	56J8-84 56E20					.10 .20	NO NO		49	
A 192	4	65.00	56J8-62 56TB3-D3					.10 .20	NO NO		49	
A 193	4	50.00	56J8-42 56TB1-U2					.10 .20	NO NO		49	

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 194	4	12.00	56J8-31 56E19					.10 .20	NO NO		49 28	
A 195	4	12.00	56J8-70 56E19					.10 .20	NO NO		49	
A 196	4	68.00	56J8-53 56J22-38					.10 .10	NO NO		49 49	
A 197	4	68.00	56J8-54 56J22-37					.10 .10	NO NO		49 49	
A 198	4	50.00	56J8-71 56TB1-H6					.10 .20	NO NO		49	
A 199	4	65.00	56J8-95 56TB3-B14					.10 .20	NO NO		49	
A 200	4	65.00	56J8-72 56TB3-B3					.10 .20	NO NO		49	
A 201	4	12.00	56J8-83 56E20					.10 .20	NO NO		49	
A 202	4	55.00	56J8-18 56TB2-S8					.10 .20	NO NO		49	
A 203	4	65.00	56J8-41 56TB3-B4					.10 .20	NO NO		49	
A 204	4	12.00	56J8-30 56E19					.10 .20	NO NO		49	
A 205	4	12.00	56J8-28 56E19					.10 .20	NO NO		49	

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 206	4	68.00	56J8-43 56J22-72					.10 .10	NO NO		49 49	
A 207	4	68.00	56J8-32 56J22-71					.10 .10	NO NO		49 49	
A 208	4	12.00	56J8-17 56E19					.10 .20	NO NO		49	
A 211	4	50.00	56J8-92 56TB1-S5					.10 .20	NO NO		49	
A 212	4	12.00	56J8-52 56E19					.10 .20	NO NO		49	
A 213	4	12.00	56J8-63 56E20					.10 .20	NO NO		49	
A 214	4	55.00	56J8-82 56TB2-D6					.10 .20	NO NO		49	
A 215	4	65.00	56J8-29 56TB3-B21					.10 .20	NO NO		49 65	
A 216	77	37.00									32 32	
A 216R			56P2-A 56TB2-G4					.20 .20	NO NO		54	
A 216Y			56P2-B 56TB2-G5					.20 .20	NO NO		54 64	
A 217	2	37.00			1.50 2.50	1.25 2.25					31 31, 28	

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 217B	76	12.00	56TB2-V3 SHLD A217					.20 .20	NO NO		64	
A 217R			56P2-C 56TB2-W4					.20 .20	NO NO		54 65	
A 217Y			56P2-D 56TB2-W3					.20 .20	NO NO		54 64	
A 218	2	33.00			1.50 2.50	1.25 2.25					31 31, 28	
A 218B	76	12.00	56TB2-V2 SHLD A218					.20 .20	NO NO		65	
A 218R			56P2-E 56TB2-X3					.20 .20	NO NO		54 64	
A 218Y			56P2-F 56TB2-W2					.20 .20	NO NO		54 65	
A 219	2	33.00			1.50 2.50	1.25 2.25					31 31, 28	
A 219B	76	12.00	56TB2-V5 SHLD A219					.20 .20	NO NO		65	
A 219R			56P2-G 56TB2-U5					.20 .20	NO NO		54 65	
A 219Y			56P2-H 56TB2-T5					.20 .20	NO NO		54 64	
A 220	2	33.00			1.50 2.50	1.25 2.25					31 31, 28	

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 220B	76	12.00	56TB2-D7 SHLD A220					.20 .20	NO NO		65	
A 220R			56P2-J 56TB2-A7					.20 .20	NO NO		54 64	
A 220Y			56P2-K 56TB2-B7					.20 .20	NO NO		54 65	
A 221	2	33.00			1.50 2.50	1.25 2.25					31 31, 28	
A 221B	76	12.00	56E48 SHLD A221					.20 .20	NO NO			
A 221R			56P2-L 56TB3-N20					.20 .20	NO NO		54	
A 221Y			56P2-M 56TB3-N21					.20 .20	NO NO		54	
A 222	2	33.00			1.50 2.50	1.25 2.25					31 31, 28	
A 222B	76	12.00	56TB3-H12 SHLD A222					.20 .20	NO NO			
A 222R			56P2-P 56TB3-C14					.20 .20	NO NO		54	
A 222Y			56P2-N 56TB3-C13					.20 .20	NO NO		54	
A 223	77	33.00									32 32	

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LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 223R			56P2-R 56TB1-D2					.20 .20	NO NO		54 64	
A 223Y			56P2-S 56TB1-C2					.20 .20	NO NO		54 64	
A 224	2	33.00			1.50 2.50	1.25 2.25					31 31, 28	
A 224B	76	12.00	56TB1-D7 SHLD A224					.20 .20	NO NO			
A 224R			56P2-T 56TB1-C6					.20 .20	NO NO		54	
A 224Y			56P2-U 56TB1-B6					.20 .20	NO NO		54	
A 225	2	37.00			1.50 2.50	1.25 2.25					31 31, 28	
A 225B	76	12.00	56TB2-V6 SHLD A225					.20 .20	NO NO		65	
A 225R			56P2-W 56TB2-W6					.20 .20	NO NO		54 65	
A 225Y			56P2-X 56TB2-X7					.20 .20	NO NO		54 64	
A 226	2	37.00			1.50 2.50	1.25 2.25					31 31, 28	
A 226B	76	12.00	56TB2-D8 SHLD A226					.20 .20	NO NO			

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LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 226R			56P2-Y 56TB2-A8					.20 .20	NO NO		54 64	
A 226Y			56P2-Z 56TB2-B8					.20 .20	NO NO		54 65	
A 227	2	45.00			1.50 2.50	1.25 2.25					31 31, 28	
A 227B	76	12.00	56TB3-H14 SHLD A227					.20 .20	NO NO			
A 227R			56P2-A* 56TB3-F14					.20 .20	NO NO		54	
A 227Y			56P2-B* 56TB3-F13					.20 .20	NO NO		54	
A 228	2	45.00			1.50 2.50	1.25 2.25					31 31, 28	
A 228B	76	12.00	56TB3-H13 SHLD A228					.20 .20	NO NO			
A 228R			56P2-F* 56TB3-D13					.20 .20	NO NO		54	
A 228Y			56P2-G* 56TB3-D14					.20 .20	NO NO		54	
A 229	1	38.00			1.50 2.50	1.25 2.25					32 32, 27	
A 229B	76	12.00	56TB1-D7 SHLD A229					.20 .20	NO NO		66	

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LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 229Y			56P3-A 56TB1-C7					.20 .20	NO NO		54	
A 230	1	38.00			1.50 2.50	1.25 2.25					32 32, 27	
A 230B	76	12.00	56TB1-D8 SHLD A230					.20 .20	NO NO		64	
A 230Y			56P3-B 56TB1-C8					.20 .20	NO NO		54	
A 231	79	38.00									31 31	
A 231G			56P3-U 56TB1-B8					.20 .20	NO NO		54	
A 231W			56P3-W 56TB1-A7					.20 .20	NO NO		54	
A 231R			56P3-C 56TB1-A8					.20 .20	NO NO		54	
A 231Y			56P3-V 56TB1-B7					.20 .20	NO NO		54	
A 232	2	42.00			1.50 2.50	1.25 2.25					31 31, 28	
A 232B	76	12.00	56TB2-M8 SHLD A232					.20 .20	NO NO			
A 232R			56P3-D 56TB2-N8					.20 .20	NO NO		54	

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LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 232Y			56P3-E 56TB2-N7					.20 .20	NO NO		54	
A 233	2	42.00			1.50 2.50	1.25 2.25					31 31, 28	
A 233B	76	12.00	56TB2-V8 SHLD A233					.20 .20	NO NO			
A 233R			56P3-F 56TB2-U8					.20 .20	NO NO		54	
A 233Y			56P3-G 56TB2-U7					.20 .20	NO NO		54	
A 234	2	38.00			1.50 2.50	1.25 2.25					31 31, 28	
A 234B	76	12.00	56TB1-B5 SHLD A234					.20 .20	NO NO		65	
A 234R			56P3-J 56TB1-B5					.20 .20	NO NO		54	
A 234Y			56P3-H 56TB1-C5					.20 .20	NO NO		54 64	
A 235	2	38.00			1.50 2.50	1.25 2.25					31 31, 28	
A 235B	76	12.00	56TB1-A6 SHLD A235					.20 .20	NO NO		65	
A 235R			56P3-K 56TB1-A6					.20 .20	NO NO		54	

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LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 235Y			56P3-L 56TB1-A5					.20 .20	NO NO		54 64	
A 236	2	50.00			1.50 2.50	1.25 2.25					31 31, 28	
A 236B	76	12.00	56TB3-S3 SHLD A236					.20 .20	NO NO		65	
A 236R			56P3-N 56TB3-R4					.20 .20	NO NO		54 64	
A 236Y			56P3-M 56TB3-R5					.20 .20	NO NO		54 64	
A 237	2	50.00			1.50 2.50	1.25 2.25					31 31, 28	
A 237B	76	12.00	56TB3-T3 SHLD A237					.20 .20	NO NO			
A 237R			56P3-R 56TB3-M14					.20 .20	NO NO		54 64	
A 237Y			56P3-P 56TB3-M13					.20 .20	NO NO		54 64	
A 238	77	38.00									32 32	
A 238R			56P3-X 56TB1-B2					.20 .20	NO NO		54	
A 238Y			56P3-Y 56TB1-A2					.20 .20	NO NO		54	

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LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 239	77	38.00									32 32	
A 239R			56P3-Z 56TB1-A4					.20 .20	NO NO		54	
A 239Y			56P3-A* 56TB1-A3					.20 .20	NO NO		54	
A 240	77	38.00									32 32	
A 240R			56P3-B* 56TB1-A3					.20 .20	NO NO		54	
A 240Y			56P3-C* 56TB1-A4					.20 .20	NO NO		54	
A 241	77	38.00									32 32	
A 241R			56P3-D* 56TB1-D3					.20 .20	NO NO		54	
A 241Y			56P3-E* 56TB1-D4					.20 .20	NO NO		54	
A 242	77	38.00									32 32	
A 242R			56P3-F* 56TB1-D4					.20 .20	NO NO		54	
A 242Y			56P3-G* 56TB1-D3					.20 .20	NO NO		54	

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LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 243	4	50.00	56P3-J* 56TB3-F5					.20 .20	NO NO		54	
A 244	4	50.00	56P3-H* 56TB3-T20					.20 .20	NO NO		54	
A 246	78	55.00									32 32	
A 246G			56P5-J* 56TB3-D16					.20 .20	NO NO		52 64	
A 246R			56P5-P 56TB3-C18					.20 .20	NO NO		52	
A 246Y			56P5-I* 56TB3-D17					.20 .20	NO NO		52 64	
A 247	77	12.00									32 32	
A 247R			56P5-K 56P5-CC					.20 .20	NO NO		52 52	
A 247Y			56P5-J 56P5-DD					.20 .20	NO NO		52 52	
A 248	2	56.00			1.50 2.50	1.25 2.25					31 31, 28	
A 248B	76	12.00	56TB3-R9 SHLD A248					.20 .20	NO NO			
A 248R			56P5-P* 56TB3-R8					.20 .18	NO NO		52 64	

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LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 248Y			56P5-N* 56TB3-R7					.20 .18	NO NO		52 64	
A 249	4	55.00	56P5-S 56TB3-K21					.20 .20	NO NO		52	
A 250	4	55.00	56P5-T 56TB3-K21					.20 .20	NO NO		52 65	
A 251	77	18.00									32 32	
A 251R			56P5-EE 56P4-D1					.20 .12	NO NO		52 69	
A 251Y			56P5-FF 56P4-D2					.20 .12	NO NO		52 69	
A 252	2	56.00			1.50 2.50	1.25 2.25					31 31, 28	
A 252B	76	12.00	56TB3-T9 SHLD A252					.20 .20	NO NO		65	
A 252R			56P5-Z 56TB3-T8					.20 .18	NO NO		52 64	
A 252Y			56P5-Y 56TB3-T7					.20 .18	NO NO		52 64	
A 253	2	56.00			1.50 2.50	1.25 2.25					31 31, 28	
A 253B	76	12.00	56TB3-S9 SHLD A253					.20 .20	NO NO		65	

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LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 253R			56P5-A* 56TB3-S8					.20 .20	NO NO		52 64	
A 253Y			56P5-B* 56TB3-S7					.20 .20	NO NO		52 64	
A 254	2	56.00			1.50 2.50	1.25 2.25					31 31, 28	
A 254B	76	12.00	56TB3-M15 SHLD A254					.20 .20	NO NO			
A 254R			56P5-C* 56TB3-M16					.20 .20	NO NO		52 64	
A 254Y			56P5-D* 56TB3-M17					.20 .20	NO NO		52 64	
A 255	2	56.00			1.50 2.50	1.25 2.25					31 31, 28	
A 255B	76	12.00	56TB3-M15 SHLD A255					.20 .20	NO NO			
A 255R			56P5-F* 56TB3-G16					.20 .18	NO NO		52 65	
A 255Y			56P5-E* 56TB3-F16					.20 .18	NO NO		52 65	
A 256	2	56.00			1.50 2.50	1.25 2.25					31 31, 28	
A 256B	76	12.00	56TB3-G9 SHLD A256					.20 .20	NO NO		65	

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SCALE-NONE	REV LTR / A	SHEET 54 OF 120

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 256R			56P5-G* 56TB3-G10					.20 .20	NO NO		52 65	
A 256Y			56P5-H* 56TB3-F10					.20 .20	NO NO		52 65	
A 257	2	56.00			1.50 2.50	1.25 2.25					31 31, 28	
A 257B	76	12.00	56TB3-S15 SHLD A257					.20 .20	NO NO			
A 257R			56P5-K* 56TB3-T16					.20 .20	NO NO		52 64	
A 257Y			56P5-M* 56TB3-T17					.20 .20	NO NO		52 64	
A 258	2	56.00			1.50 2.50	1.25 2.25					31 31, 28	
A 258B	76	12.00	56TB3-R9 SHLD A258					.20 .20	NO NO		65	
A 258R			56P5-Q* 56TB3-R10					.20 .20	NO NO		52 64	
A 258Y			56P5-R* 56TB3-R11					.20 .20	NO NO		52 64	
A 259	78	55.00									32 32	
A 259G			56P5-C 56TB3-F18					.20 .20	NO NO		52 64	

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LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 259R			56P5-B 56TB3-C18					.20 .20	NO NO		52 65	
A 259Y			56P5-A 56TB3-D18					.20 .20	NO NO		52 64	
A 260	2	56.00			1.50 2.50	1.25 2.25					31 31, 28	
A 260B	76	12.00	56TB3-S15 SHLD A260					.20 .20	NO NO			
A 260R			56P5-U* 56TB3-S17					.20 .20	NO NO		52 64	
A 260Y			56P5-V* 56TB3-S16					.20 .20	NO NO		52 64	
A 261	2	56.00			1.50 2.50	1.25 2.25					31 31, 28	
A 261B	76	12.00	56TB3-R15 SHLD A261					.20 .20	NO NO			
A 261R			56P5-W* 56TB3-N13					.20 .20	NO NO		52	
A 261Y			56P5-X* 56TB3-N14					.20 .20	NO NO		52	
A 262	2	56.00			1.50 2.50	1.25 2.25					31 31, 28	
A 262B	76	12.00	56TB3-K9 SHLD A262					.20 .20	NO NO			

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LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 262R			56P5-Y* 56TB3-K10					.20 .20	NO NO		52	
A 262Y			56P5-Z* 56TB3-K11					.20 .20	NO NO		52	
A 263	2	56.00			1.50 2.50	1.25 2.25					31 31, 28	
A 263B	76	12.00	56TB3-H15 SHLD A263					.20 .20	NO NO			
A 263R			56P5-HH 56TB3-H16					.20 .20	NO NO		52 64	
A 263Y			56P5-BB 56TB3-H17					.20 .20	NO NO		52 64	
A 264	4	55.00	56P5-AA 56TB3-S18					.20 .20	NO NO		52 64	
A 265	77	47.00									32 32	
A 265R			56P5-CC 56TB2-K2					.20 .20	NO NO		52	
A 265Y			56P5-DD 56TB2-L2					.20 .20	NO NO		52	
A 266	77	43.00									32 32	
A 266R			56P5-L 56TB1-T1					.20 .20	NO NO		52	

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LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 266Y			56P5-M 56TB1-T2					.20 .20	NO NO		52	
A 267	77	18.00									32 32	
A 267R			56P5-X 56P4-F2					.20 .12	NO NO		52 69	
A 267Y			56P5-W 56P4-F1					.20 .12	NO NO		52 69	
A 268	77	18.00									32 32	
A 268R			56P5-J 56P4-E2					.20 .12	NO NO		52 69	
A 268Y			56P5-K 56P4-E1					.20 .12	NO NO		52 69	
A 270	4	55.00	56P5-R 56TB3-F21					.20 .20	NO NO		52	
A 271	78	48.00									32 32	
A 271G			56P6-C 56TB1-G2					.20 .20	NO NO		54	
A 271R			56P6-A 56TB1-H3					.20 .20	NO NO		54	
A 271Y			56P6-B 56TB1-H2					.20 .20	NO NO		54	

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LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 272	4	48.00	56P6-F 56TB1-D5					.20 .20	NO NO		54 64	
A 273	77	48.00									32 32	
A 273R			56P6-H 56TB1-A2					.20 .20	NO NO		54	
A 273Y			56P6-J 56TB1-B2					.20 .20	NO NO		54	
A 274	4	36.00	56P6-K 56TB3-G5					.20 .20	NO NO		54 64	
A 275	77	36.00									32 32	
A 275R			56P6-M 56TB3-L4					.20 .20	NO NO		54 64	
A 275Y			56P6-L 56TB3-L3					.20 .20	NO NO		54 64	
A 276	4	36.00	56P6-N 56TB3-R6					.20 .20	NO NO		54	
A 277	4	36.00	56P6-Y 56TB3-N6					.20 .20	NO NO		54	
A 278	2	36.00			1.50 2.50	1.25 2.25					31 31, 28	
A 278B	76	12.00	56TB3-R3 SHLD A278					.20 .20	NO NO			

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LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 278R			56P6-V 56TB3-N5					.20 .20	NO NO		54 64	
A 278Y			56P6-W 56TB3-N4					.20 .20	NO NO		54 64	
A 279	2	36.00			1.50 2.50	1.25 2.25					31 31, 28	
A 279B	76	12.00	56TB3-N3 SHLD A279					.20 .20	NO NO		66	
A 279R			56P6-X 56TB3-N1					.20 .20	NO NO		54 64	
A 279Y			56P6-R 56TB3-N2					.20 .20	NO NO		54 64	
A 280	4	36.00	56P6-Z 56TB3-H4					.20 .20	NO NO		54 64	
A 281	77	36.00									32 32	
A 281R			56P6-F* 56TB3-C2					.20 .20	NO NO		54 64	
A 281Y			56P6-G* 56TB3-C3					.20 .20	NO NO		54	
A 282	77	36.00									32 32	
A 282R			56P6-B* 56TB3-L13					.20 .20	NO NO		54 64	

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LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 282Y			56P6-C* 56TB3-K13					.20 .20	NO NO		54 64	
A 283	77	36.00									32 32	
A 283R			56P6-D* 56TB3-K19					.20 .20	NO NO		54	
A 283Y			56P6-E* 56TB3-H19					.20 .20	NO NO		54	
A 284	4	36.00	56P6-D 56TB3-T20					.20 .20	NO NO		54 65	
A 285	4	36.00	56P6-P 56TB3-M1					.20 .20	NO NO		54 64	
A 286	4	36.00	56P6-A* 56TB3-K3					.20 .20	NO NO		54 64	
A 287	4	44.00	56P6-E 56TB2-D4					.20 .20	NO NO		54	
A 288	4	36.00	56P6-G 56TB3-F21					.20 .20	NO NO		54	
A 289	6	53.00			2.00 2.50	1.75 2.25					31 31, 28	
A 289B	76	12.00	56TB1-S8 SHLD A289					.20 .20	NO NO		64	
A 289L			56P7-C 56TB1-U8					.40 .20	NO NO		54 64	

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LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 289R			56P7-A 56TB1-T8					.40 .20	NO NO		54 64	
A 289W			56P7-B 56TB1-U7					.40 .20	NO NO		54 64	
A 290	6	53.00			2.00 2.50	1.75 2.25					31 31, 28	
A 290B	76	12.00	56TB1-N8 SHLD A290					.20 .20	NO NO		66	
A 290L			56P7-F 56TB1-L7					.40 .20	NO NO		54 64	
A 290R			56P7-D 56TB1-M8					.40 .20	NO NO		54 64	
A 290W			56P7-E 56TB1-L8					.40 .20	NO NO		54 64	
A 291	6	53.00			2.00 2.50	1.75 2.25					31 31, 28	
A 291B	76	12.00	56TB1-S6 SHLD A291					.20 .20	NO NO		65	
A 291L			56P7-J 56TB1-U6					.40 .20	NO NO		54 64	
A 291R			56P7-G 56TB1-T6					.40 .20	NO NO		54 64	
A 291W			56P7-H 56TB1-U5					.40 .20	NO NO		54 64	

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LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 292	6	53.00			2.00 2.50	1.75 2.25					31 31, 28	
A 292B	76	12.00	56TB1-S3 SHLD A292					.20 .20	NO NO		66	
A 292L			56P7-M 56TB1-U3					.40 .20	NO NO		54 64	
A 292R			56P7-K 56TB1-U4					.40 .20	NO NO		54 64	
A 292W			56P7-L 56TB1-T3					.40 .20	NO NO		54 64	
A 293	6	53.00			2.00 2.50	1.75 2.25					31 31, 28	
A 293B	76	12.00	56TB1-N4 SHLD A293					.20 .20	NO NO			
A 293L			56P7-R 56TB1-M4					.40 .20	NO NO		54 64	
A 293R			56P7-N 56TB1-L4					.40 .20	NO NO		54 64	
A 293W			56P7-P 56TB1-L3					.40 .20	NO NO		54 64	
A 294	6	53.00			2.00 2.50	1.75 2.25					31 31, 28	
A 294B	76	12.00	56TB1-N5 SHLD A294					.20 .20	NO NO		 28	

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LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 294L			56P7-W 56TB1-L5					.40 .20	NO NO		54 64	
A 294R			56P7-U 56TB1-M5					.40 .20	NO NO		54 64	
A 294W			56P7-V 56TB1-L6					.40 .20	NO NO		54 64	
A 295	77	53.00									32 32	
A 295R			56P7-X 56TB1-M7					.20 .20	NO NO		54 64	
A 295Y			56P7-Y 56TB1-M6					.20 .20	NO NO		54 64	
A 296	77	53.00									32 32	
A 296R			56P7-Z 56TB1-M3					.20 .20	NO NO		54 64	
A 296Y			56P7-A* 56TB1-N2					.20 .20	NO NO		54 64	
A 297	77	53.00									32 32	
A 297R			56P7-B* 56TB1-T5					.20 .20	NO NO		54 64	
A 297Y			56P7-C* 56TB1-T4					.20 .20	NO NO		54 64	

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LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 298	79	53.00									31 31	
A 298G			56P7-G* 56TB1-B4					.20 .20	NO NO		54 64	
A 298N			56P7-H* 56TB1-C4					.20 .20	NO NO		54 64	
A 298R			56P7-F* 56TB1-C3					.20 .20	NO NO		54 64	
A 298Y			56P7-J* 56TB1-B3					.20 .20	NO NO		54 64	
A 299	77	55.00									32 32	
A 299R			56P8-A 56TB2-U3					.20 .20	NO NO		52	
A 299Y			56P8-B 56TB2-T2					.20 .20	NO NO		52	
A 300	78	46.00									32 32	
A 300G			56P8-G 56TB3-C16					.20 .20	NO NO		52	
A 300R			56P8-F 56TB3-C19					.20 .20	NO NO		52	
A 300Y			56P8-E 56TB3-C17					.20 .20	NO NO		52	

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LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 301	77	55.00									32 32	
A 301R			56P8-J 56TB2-K2					.20 .20	NO NO		52 65	
A 301Y			56P8-K 56TB2-L2					.20 .20	NO NO		52 65	
A 302	2	46.00			1.50 2.50	1.25 2.25					31 31, 28	
A 302B	76	12.00	56TB3-S15 SHLD A302					.20 .20	NO NO		66	
A 302R			56P8-N 56TB3-R17					.20 .20	NO NO		52 64	
A 302Y			56P8-P 56TB3-R16					.20 .20	NO NO		52 64	
A 303	4	46.00	56P8-R 56TB3-K15					.20 .20	NO NO		52	
A 304	2	46.00			1.50 2.50	1.25 2.25					31 31, 28	
A 304B	76	12.00	56TB3-H15 SHLD A304					.20 .20	NO NO		66	
A 304R			56P8-T 56TB3-K17					.20 .20	NO NO		52 64	
A 304Y			56P8-S 56TB3-K16					.20 .20	NO NO		52 64	

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LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 305	4	46.00	56P8-U 56TB3-R18					.20 .20	NO NO		52 64	
A 306	2	46.00			1.50 2.50	1.25 2.25					31 31, 28	
A 306B	76	12.00	56TB3-T15 SHLD A306					.20 .20	NO NO			
A 3C6R			56P8-V 56TB3-S13					.20 .20	NO NO		52 64	
A 306Y			56P8-W 56TB3-S14					.20 .20	NO NO		52 64	
A 307	2	46.00			1.50 2.50	1.25 2.25					31 31, 28	
A 3C7B	76	12.00	56TB3-T15 SHLD A307					.20 .20	NO NO		66	
A 3C7R			56P8-X 56TB3-T14					.20 .20	NO NO		52 64	
A 307Y			56P8-Y 56TB3-T13					.20 .20	NO NO		52 64	
A 3C8	78	46.00									32 32	
A 308G			56P8-D* 56TB3-F17					.20 .20	NO NO		52	
A 308R			56P8-H 56TB3-C19					.20 .20	NO NO		52 65	

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LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 3C8Y			56P8-C* 56TB3-G17					.20 .20	NO NO		52	
A 309	2	46.00			1.50 2.50	1.25 2.25					31 31, 28	
A 309B	76	12.00	56TB3-M15 SHLD A309					.20 .20	NO NO			
A 309R			56P8-E* 56TB3-N16					.20 .20	NO NO		52 64	
A 309Y			56P8-F* 56TB3-N17					.20 .20	NO NO		52 64	
A 310	2	46.00			1.50 2.50	1.25 2.25					31 31, 28	
A 310B	76	12.00	56TB3-M15 SHLD A310					.20 .20	NO NO		66	
A 310R			56P8-G* 56TB3-L16					.20 .20	NO NO		52 64	
A 310Y			56P8-I* 56TB3-L17					.20 .20	NO NO		52 64	
A 311	4	46.00	56P8-H* 56TB3-T18					.20 .20	NO NO		52 64	
A 312	2	46.00			1.50 2.50	1.25 2.25					31 31, 28	
A 312B	76	12.00	56TB3-K9 SHLD A312					.20 .20	NO NO		66	

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LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 312R			56P8-K* 56TB3-K11					.20 .20	NO NO		52 66	
A 312Y			56P8-J* 56TB3-K10					.20 .20	NO NO		52 66	
A 313	2	46.00			1.50 2.50	1.25 2.25					31 31, 28	
A 313B	76	12.00	56TB3-R15 SHLD A313					.20 .20	NO NO		66	
A 313R			56P8-N* 56TB3-N14					.20 .20	NO NO		52 66	
A 313Y			56P8-M* 56TB3-N13					.20 .20	NO NO		52 66	
A 314	77	59.00									32 32	
A 314R			56P8-R* 56TB1-T1					.20 .20	NO NO		52	
A 314Y			56P8-S* 56TB1-T2					.20 .20	NO NO		52	
A 315	4	46.00	56P8-B* 56TB3-K15					.20 .20	NO NO		52	
A 316	4	46.00	56P8-T* 56TB3-F22					.20 .20	NO NO		52	
A 317	77	42.00									32 32	

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LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 317R			56P9-5 56TB3-T19					.10 .20	NO NO		49 64	
A 317Y			56P9-6 56TB3-S19					.10 .20	NO NO		49 64	
A 318	77	42.00									32 32	
A 318R			56P9-9 56TB3-B18					.10 .20	NO NO		49 64	
A 318Y			56P9-8 56TB3-B19					.10 .20	NO NO		49 64	
A 319	78	54.00									32 32	
A 319G			56P9-78 56TB1-H2					.10 .20	NO NO		49 65	
A 319R			56P9-67 56TB1-G2					.10 .20	NO NO		49 65	
A 319Y			56P9-79 56TB1-H3					.10 .20	NO NO		49 65	
A 320	77	42.00									32 32	
A 320R			56P9-22 56TB3-D2					.10 .20	NO NO		49	
A 320Y			56P9-34 56TB3-C3					.10 .20	NO NO		49	

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LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 321	77	42.00									32 32	
A 321R			56P9-45 56TB2-K1					.10 .20	NO NO		49	
A 321Y			56P9-55 56TB2-L1					.10 .20	NO NO		49	
A 322	77	50.00									32 32	
A 322R			56P9-56 56TB2-U3					.10 .20	NO NO		49	
A 322Y			56P9-57 56TB2-T3					.10 .20	NO NO		49	
A 323	77	54.00									32 32	
A 323R			56P9-59 56TB1-C6					.10 .20	NO NO		49 65	
A 323Y			56P9-58 56TB1-B6					.10 .20	NO NO		49 65	
A 324	77	54.00									32 32	
A 324R			56P9-69 56TB1-H4					.10 .20	NO NO		49	
A 324Y			56P9-81 56TB1-G4					.10 .20	NO NO		49	

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LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 325	77	54.00									32 32	
A 325R			56P9-68 56TB1-H7					.10 .20	NO NO		49	
A 325Y			56P9-80 56TB1-G7					.10 .20	NO NO		49	
A 326	4	42.00	56P9-20 56TB3-N22					.10 .20	NO NO		49 64	
A 327	4	42.00	56P9-19 56TB3-T21					.10 .20	NO NO		49 64	
A 328	4	42.00	56P9-65 56TB3-H20					.10 .20	NO NO		49 64	
A 329	4	42.00	56P9-66 56TB3-L21					.10 .20	NO NO		49	
A 330	4	42.00	56P9-4 56TB3-R20					.10 .20	NO NO		49 64	
A 331	4	42.00	56P9-18 56TB3-N19					.10 .20	NO NO		49	
A 332	4	54.00	56P9-13 56TB1-H6					.10 .20	NO NO		49 65	
A 333	4	42.00	56P9-49 56TB3-B5					.10 .20	NO NO		49	
A 334	4	42.00	56P9-48 56TB3-H6					.10 .20	NO NO		49	

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LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 335	4	42.00	56P9-47 56TB3-B3					.10 .20	NO NO		49	
A 336	4	54.00	56P9-12 56TB1-H8					.10 .20	NO NO		49 65	
A 337	4	12.00	56P9-27 56E21					.10 .20	NO NO		49 28	
A 338	2	50.00			1.00 2.50	.75 2.25					31 31, 28	
A 338B	76	12.00	56TB2-S3 SHLD A338					.20 .20	NO NO		65	
A 338R			56P9-39 56TB2-N3					.10 .20	NO NO		49 65	
A 338Y			56P9-38 56TB2-R3					.10 .20	NO NO		49 65	
A 339	4	12.00	56P9-37 56E21					.10 .20	NO NO		49	
A 340	4	12.00	56P9-26 56E21					.10 .20	NO NO		49	
A 341	4	12.00	56P9-25 56E21					.10 .20	NO NO		49	
A 342	4	42.00	56P9-10 56TB3-F5					.10 .20	NO NO		49	
A 343	4	54.00	56P9-23 56TB1-S5					.10 .20	NO NO		49	

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 344	4	42.00	56P9-11 56TB3-D3					.10 .20	NO NO		49 65	
A 345	4	54.00	56P9-46 56TB1-U2					.10 .20	NO NO		49 66	
A 346	4	42.00	56P9-35 56TB3-B4					.10 .20	NO NO		49	
A 347	4	12.00	56P9-36 56E21					.10 .20	NO NO		49	
A 348	4	12.00	56P9-24 56E21					.10 .20	NO NO		49	
A 349	4	54.00	56P9-33 56TB1-L2					.10 .20	NO NO		49 64	
A 350	4	54.00	56P9-43 56TB1-M2					.10 .20	NO NO		49 64	
A 351	4	54.00	56P9-44 56TB1-T7					.10 .20	NO NO		49 64	
A 352	77	54.00									32 32	
A 352R			56P9-93 56TB1-D4					.10 .20	NO NO		49 66	
A 352Y			56P9-106 56TB1-D3					.10 .20	NO NO		49 66	
A 353	77	54.00									32 32	

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 353R			56P9-107 56TB1-A3					.10 .20	NO NO		49 66	
A 353Y			56P9-108 56TB1-A4					.10 .20	NO NO		49 66	
A 354	77	54.00									32 32	
A 354R			56P9-94 56TB1-B2					.10 .20	NO NO		49 66	
A 354Y			56P9-95 56TB1-A2					.10 .20	NO NO		49 66	
A 355	2	42.00			1.00 2.50	.75 2.25					31 31, 28	
A 355B	76	12.00	56TB3-H13 SHLD A355					.20 .20	NO NO		66	
A 355R			56P9-1 56TB3-D13					.10 .20	NO NO		49 66	
A 355Y			56P9-14 56TB3-D14					.10 .20	NO NO		49 66	
A 356	2	42.00			1.00 2.50	.75 2.25					31 31, 28	
A 356B	76	12.00	56TB3-H14 SHLD A356					.20 .20	NO NO		66	
A 356R			56P9-2 56TB3-F13					.10 .20	NO NO		49 66	

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 356Y			56P9-3 56TB3-F14					.10 .20	NO NO		49 66	
A 357	2	42.00			1.00 2.50	.75 2.25					31 31, 28	
A 357B	76	12.00	56TB3-H12 SHLD A357					.20 .20	NO NO		66	
A 357R			56P9-15 56TB3-C13					.10 .20	NO NO		49 66	
A 357Y			56P9-29 56TB3-C14					.10 .20	NO NO		49 66	
A 358	2	42.00			1.00 2.50	.75 2.25					31 31, 28	
A 358B	76		56E48 SHLD A358					.20 .20	NO NO			
A 358R			56P9-28 56TB3-N20					.10 .20	NO NO		49 66	
A 358Y			56P9-40 56TB3-N21					.10 .20	NO NO		49 66	
A 359	2	50.00			1.00 2.50	.75 2.25					31 31, 28	
A 359B	76	12.00	56TB2-V8 SHLD A359					.20 .20	NO NO		66	
A 359R			56P9-16 56TB2-U7					.10 .20	NO NO		49 65	

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 359Y			56P9-17 56TB2-U8					.10 .20	NO NO		49 66	
A 360	2	50.00			1.00 2.50	.75 2.25					31 31, 28	
A 360B	76	12.00	56TB2-M8 SHLD A360					.18 .20	NO NO		66	
A 360R			56P9-30 56TB2-N8					.10 .18	NO NO		49 65	
A 360Y			56P9-31 56TB2-N7					.10 .18	NO NO		49 66	
A 361	4	54.00	56P9-41 56TB1-C8					.10 .18	NO NO		49 65	
A 362	4	54.00	56P9-52 56TB1-C7					.10 .18	NO NO		49 65	
A 363	79	54.00									31 31	
A 363G			56P9-61 56TB1-B8					.10 .18	NO NO		49 65	
A 363N			56P9-51 56TB1-B7					.10 .18	NO NO		49 65	
A 363R			56P9-60 56TB1-A7					.10 .18	NO NO		49 65	
A 363Y			56P9-50 56TB1-A8					.10 .18	NO NO		49 65	

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LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 364	2	50.00			1.00 2.50	.75 2.25					31 31, 28	
A 364B	76	12.00	56TB2-F2 SHLD A364					.20 .20	NO NO		66	
A 364R			56P9-96 56TB2-H2					.10 .20	NO NO		49 66	
A 364Y			56P9-82 56TB2-G2					.10 .20	NO NO		49 66	
A 365	2	50.00			1.00 2.50	.75 2.25					31 31, 28	
A 365B	76	12.00	56TB2-F7 SHLD A365					.20 .20	NO NO		66	
A 365R			56P9-70 56TB2-H7					.10 .20	NO NO		49 66	
A 365Y			56P9-71 56TB2-G7					.10 .20	NO NO		49 66	
A 366	2	50.00			1.00 2.50	.75 2.25					31 31, 28	
A 366B	76	12.00	56TB2-S2 SHLD A366					.20 .20	NO NO		66	
A 366R			56P9-72 56TB2-N2					.10 .20	NO NO		49 66	
A 366Y			56P9-83 56TB2-R2					.10 .20	NO NO		49 66	

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LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 367	4	42.00	56P9-98 56TB3-D4					.10 .20	NO NO		49 64	
A 368	4	42.00	56P9-85 56TB3-C5					.10 .20	NO NO		49 64	
A 369	4	42.00	56P9-97 56TB3-D5					.10 .20	NO NO		49 64	
A 370	4	42.00	56P9-73 56TB3-C4					.10 .20	NO NO		49 64	
A 371	78	42.00									32 32	
A 371G			56P9-64 56TB3-G19					.10 .20	NO NO		49 64	
A 371R			56P9-74 56TB3-F19					.10 .20	NO NO		49 64	
A 371Y			56P9-75 56TB3-D19					.10 .20	NO NO		49 64	
A 372	77	42.00									32 32	
A 372R			56P9-87 56TB3-D9					.10 .20	NO NO		49 64	
A 372Y			56P9-88 56TB3-D10					.10 .20	NO NO		49 64	
A 373	77	42.00									32 32	

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LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 373R			56P9-100 56TB3-D7					.10 .20	NO NO		49 64	
A 373Y			56P9-101 56TB3-C7					.10 .20	NO NO		49 64	
A 374	77	42.00									32 32	
A 374R			56P9-89 56TB3-B7					.10 .20	NO NO		49 64	
A 374Y			56P9-102 56TB3-B8					.10 .20	NO NO		49 64	
A 375	77	42.00									32 32	
A 375R			56P9-90 56TB3-C9					.10 .20	NO NO		49 64	
A 375Y			56P9-103 56TB3-C10					.10 .20	NO NO		49 64	
A 376	77	42.00									32 32	
A 376R			56P9-91 56TB3-C17					.10 .20	NO NO		49 65	
A 376Y			56P9-92 56TB3-C16					.10 .20	NO NO		49 65	
A 377	77	42.00									32 32	

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LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 377R			56P9-104 56TB3-B9					.10 .20	NO NO		49 64	
A 377Y			56P9-105 56TB3-B10					.10 .20	NO NO		49 64	
A 378	77	42.00									32 32	
A 378R			56P9-76 56TB3-G17					.10 .20	NO NO		49 65	
A 378Y			56P9-77 56TB3-F17					.10 .20	NO NO		49 65	
A 379	77	42.00									32 32	
A 379R			56P9-42 56TB3-K19					.10 .20	NO NO		49 65	
A 379Y			56P9-53 56TB3-H19					.10 .20	NO NO		49 65	
A 380	4	42.00	56P9-62 56TB3-L19					.10 .20	NO NO		49 64	
A 381	4	42.00	56P9-54 56TB3-M19					.10 .20	NO NO		49 64	
A 382	4	42.00	56P9-63 56TB3-N19					.10 .20	NO NO		49 65	
A 383	77	42.00									32 32	

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 383R			56P9-86 56TB3-D8					.10 .20	NO NO		49 64	
A 383Y			56P9-99 56TB3-C8					.10 .20	NO NO		49 64	
A 384	4	50.00	56P9-84 56TB3-D6					.10 .20	NO NO		49 65	
A 385	4	50.00	56P9-32 56TB2-F4					.10 .20	NO NO		49 64	
A 386	77	42.00									32 32	
A 386R			56P9-21 56TB3-S20					.10 .20	NO NO		49 64	
A 386Y			56P9-7 56TB3-R19					.10 .20	NO NO		49 64	
A 387	78	40.00									32 32	
A 387G			56J9-5 56J22-232					.10 .10	NO NO		49 49	
A 387R			56J9-18 56J22-195					.10 .10	NO NO		49 49	
A 387Y			56J9-4 56J22-233					.10 .10	NO NO		49 49	
A 388	78	40.00									32 32	

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 388G			56J9-6 56J22-197					.10 .10	NO NO		49 49	
A 388R			56J9-7 56J22-235					.10 .10	NO NO		49 49	
A 388Y			56J9-20 56J22-198					.10 .10	NO NO		49 49	
A 389	78	40.00									32 32	
A 389G			56J9-17 56J22-192					.10 .10	NO NO		49 49	
A 389R			56J9-16 56J22-230					.10 .10	NO NO		49 49	
A 389Y			56J9-3 56J22-193					.10 .10	NO NO		49 49	
A 390	4	40.00	56J9-73 56TB3-F3					.10 .20	NO NO		49	
A 391	4	40.00	56J9-21 56TB3-K4					.10 .20	NO NO		49 64	
A 392	4	40.00	56J9-2 56TB3-M3					.10 .20	NO NO		49 64	
A 393	78	40.00									32 32	
A 393G			56J9-50 56J22-238					.10 .10	NO NO		49 49	

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 393R			56J9-41 56J22-237					.10 .10	NO NO		49 49	
A 393Y			56J9-40 56J22-200					.10 .10	NO NO		49 49	
A 394	4	40.00	56J9-72 56TB3-B11					.10 .20	NO NO		49 64	
A 395	4	40.00	56J9-97 56TB3-R6					.10 .20	NO NO		49 65	
A 396	4	40.00	56J9-98 56TB3-C1					.10 .20	NO NO		49 64	
A 397	4	40.00	56J9-104 56TB3-M4					.10 .20	NO NO		49 64	
A 398	4	40.00	56J9-86 56TB3-L1					.10 .20	NO NO		49 65	
A 399	4	40.00	56J9-102 56TB3-H3					.10 .20	NO NO		49 64	
A 400	4	40.00	56J9-76 56TB3-L5					.10 .20	NO NO		49 64	
A 401	79	40.00									31 31	
A 401G			56J9-87 56TB3-H1					.10 .20	NO NO		49 64	
A 401N			56J9-88 56TB3-G2					.10 .20	NO NO		49 64	

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 401R			56J9-100 56TB3-G1					.10 .20	NO NO		49 64	
A 401Y			56J9-101 56TB3-H2					.10 .20	NO NO		49 64	
A 402	4	40.00	56J9-90 56TB3-N6					.10 .20	NO NO		49 65	
A 403	4	40.00	56J9-74 56TB3-H5					.10 .20	NO NO		49 64	
A 404	4	40.00	56J9-59 56TB3-G18					.10 .20	NO NO		49 64	
A 405	4	40.00	56J9-58 56TB3-K18					.10 .20	NO NO		49 64	
A 406	4	12.00	56J9-60 56E56					.10 .20	NO NO		49 27	
A 407	2	39.00			1.00 2.50	.75 2.25					31 31, 28	
A 407B	76	12.00	56E44 SHLD A407					.20 .20	NO NO			
A 407R			56E58 56J21-17					.20 .10	NO NO		28 49	
A 4C7Y			56J9-70 56J21-16					.10 .10	NO NO		49 49	
A 4C8	4	40.00	56J9-66 56TB3-H6					.10 .20	NO NO		49 65	

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LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 409	77	40.00									32 32	
A 409R			56J9-68 56TB3-B13					.10 .20	NO NO		49 65	
A 409Y			56J9-81 56TB3-B12					.10 .20	NO NO		49 65	
A 410	4	53.00	56J9-67 56TB1-G1					.10 .20	NO NO		49 65	
A 411	4	49.00	56J9-93 56TB2-S4					.10 .20	NO NO		49 65	
A 412	4	49.00	56J9-79 56TB2-S5					.10 .20	NO NO		49 65	
A 413	4	49.00	56J9-106 56TB2-S6					.10 .20	NO NO		49 65	
A 414	4	49.00	56J9-78 56TB2-S7					.10 .20	NO NO		49 65	
A 415	4	12.00	56J9-42 56E56					.10 .20	NO NO		49	
A 416	77	49.00									32 32	
A 416R			56J9-80 56TB2-K1					.10 .20	NO NO		49	
A 416Y			56J9-69 56TB2-L1					.10 .20	NO NO		49	

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LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 420	4	12.00	56J9-36 56E56					.10 .20	NO NO		49	
A 425	3	40.00			1.00 2.50	.75 2.25					31 31, 28	
A 425B	76	12.00	56TB3-M9 SHLD A425					.20 .20	NO NO		65	
A 425G			56J9-24 56TB3-M12					.10 .20	NO NO		49 64	
A 425R			56J9-10 56TB3-M10					.10 .20	NO NO		49 64	
A 425Y			56J9-23 56TB3-M11					.10 .20	NO NO		49 64	
A 426	2	40.00			1.00 2.50	.75 2.25					31 31, 28	
A 426B	76	12.00	56TB3-G12 SHLD A426					.20 .20	NO NO		65	
A 426R			56J9-19 56TB3-G11					.10 .20	NO NO		49 64	
A 426Y			56J9-33 56TB3-G12					.10 .20	NO NO		49	
A 427	2	40.00			1.00 2.50	.75 2.25					31 31, 28	
A 427B	76	12.00	56TB3-F12 SHLD A427					.20 .20	NO NO		65	

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LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 427R			56J9-35 56TB3-F11					.10 .20	NO NO		49 64	
A 427Y			56J9-34 56TB3-F12					.10 .20	NO NO		49	
A 428	4	40.00	56J9-99 56TB3-L18					.10 .20	NO NO		49 64	
A 429	4	40.00	56J9-1 56TB3-L22					.10 .20	NO NO		49	
A 431	77	49.00									32 32	
A 431R			56J9-32 56TB2-A2					.10 .20	NO NO		49 65	
A 431Y			56J9-44 56TB2-A1					.10 .20	NO NO		49 65	
A 433	2	39.00			3.00 2.50	2.75 2.25					31 31, 28	
A 433B	76	12.00	56E44 SHLD A433					.20 .20	NO NO			
A 433R			56E58 56J21-87					.20 .10	NO NO		49	
A 433Y			56J9-30 56J21-86				2.00	.10 .10	NO NO		49 49	
A 434	2	39.00			3.00 2.50	2.75 2.25					31 31, 28	

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LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 434B	76	12.00	56E44					.20	NO			
			SHLD A434					.20	NO			
A 434R			56E58					.20	NO			
			56J21-89					.10	NO		49	
A 434Y			56J9-31				2.00	.10	NO		49	
			56J21-88					.10	NO		49	
A 435	4	40.00	56J9-51					.10	NO		49	
			56TB3-M22					.20	NO			
A 436	4	40.00	56J9-83					.10	NO		49	
			56TB3-L15					.20	NO		64	
A 437	2	39.00			3.00	2.75					31	
					2.50	2.25					31, 28	
A 437B	76	12.00	56E44					.20	NO			
			SHLD A437					.20	NO			
A 437R			56E58					.20	NO			
			56J21-55					.10	NO		49	
A 437Y			56J9-25				2.00	.10	NO		49	
			56J21-54					.10	NO		49	
A 438	4	40.00	56J9-92					.10	NO		49	
			56TB3-K1					.20	NO		64	
A 439	4	40.00	56J9-94					.10	NO		49	
			56TB3-D1					.20	NO		64	
A 440	2	39.00			1.00	.75					31, 28	
					2.50	2.25					31	

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 440A	76	12.00	SHLD A440					.20	NO			
			56E44					.20	NO			
A 440R			56J21-120					.10	NO		49	
			56E58					.20	NO			
A 440Y			56J21-119					.10	NO		49	
			56E56					.20	NO			
A 441	4	40.00	56J9-103					.10	NO		49	
			56TB3-M5					.20	NO		64	
A 442	4	40.00	56J9-85					.10	NO		49	
			56TB3-G4					.20	NO		64	
A 443	4	40.00	56J9-89					.10	NO		49	
			56TB3-G3					.20	NO		64	
A 444	4	40.00	56J9-75					.10	NO		49	
			56TB3-K5					.20	NO		64	
A 445	4	40.00	56J9-71					.10	NO		49	
			56TB3-M20					.20	NO		66	
A 446	4	40.00	56J9-105					.10	NO		49	
			56TB3-K2					.20	NO		64	
A 447	4	42.00	56J9-95					.10	NO		49	
			56P10-48					.10	NO		49	
A 448	77	40.00									32	
											32	
A 448R			56J9-65					.10	NO		49	
			56P10-39					.10	NO		49	

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 448Y			56J9-77					.10	NO		49	
			56P10-38					.10	NO		49	
A 449	2	39.00			3.00	2.75					31	
					2.50	2.25					31, 28	
A 449B	76	12.00	56E44					.20	NO			
			SHLD A449					.20	NO			
A 449R			56J9-37				2.00	.10	NO		49	
			56J21-18					.10	NO		49	
A 449Y			56E58					.20	NO			
			56J21-19					.10	NO		49	
A 450	4	49.00	56J9-26					.10	NO		49	
			56TB2-D6					.20	NO			
A 451	4	40.00	56J9-91					.10	NO		49	
			56TB3-F22					.20	NO			
A 452	4	54.00	56P10-13					.10	NO		49	
			56TB1-S5					.20	NO		66	
A 453	4	42.00	56P10-10					.10	NO		49	
			56J9-29					.10	NO		49	
A 454	4	42.00	56P10-12					.10	NO		49	
			56TB3-F5					.20	NO		66	
A 455	4	50.00	56P10-24					.10	NO		49	
			56TB2-S8					.20	NO		65	
A 458	4	12.00	56TB2-D5					.20	NO		65	
			56E48					.20	NO			

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 460	4	42.00	56P10-49					.10	NO		49	
			56TB3-B14					.20	NO		65	
A 461	4	41.00	56P10-8					.10	NO		49	
			56J22-171					.10	NO		49	
A 462	4	42.00	56P10-9					.10	NO		49	
			56TB3-F1					.20	NO		64	
A 464	4	49.00	56J10-2					.10	NO		49	
			56TB3-F3					.20	NO		66	
A 465	4	49.00	56J10-6					.10	NO		49	
			56TB3-M6					.20	NO		66	
A 466	4	61.00	56J10-7					.10	NO		49	
			56TB1-F1					.20	NO			
A 467	77	48.00									32	
											32	
A 467R			56J10-38					.10	NO		49	B
			56J21-84					.10	NO		49	
A 467Y			56E25					.20	NO		28	B
			56J21-85					.10	NO		49	
A 468	77	48.00									32	
											32	
A 468R			56E25					.20	NO			B
			56J21-13					.10	NO		49	
A 468Y			56J10-49					.10	NO		49	B
			56J21-12					.10	NO		49	

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM.JKT AREA NO.	STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 469	4	48.00	56J10-72 56J21-141					.10 .10	NO NO		49 49	A
A 470	77	48.00									32 32	
A 470R			56J10-42 56J21-47					.10 .10	NO NO		49 49	A
A 47CY			56E24 56J21-48					.20 .10	NO NO		28 49	A
A 471	77	48.00									32 32	
A 471R			56J10-20 56J21-82					.10 .10	NO NO		49 49	A
A 471Y			56E24 56J21-83					.20 .10	NO NO		 49	A
A 472	77	48.00									32 32	
A 472R			56J10-36 56J21-150					.10 .10	NO NO		49 49	B
A 472Y			56E25 56J21-151					.20 .10	NO NO		 49	B
A 473	4	48.00	56J10-71 56J21-75					.10 .10	NO NO		49 49	A
A 474	78	49.00									32 32	

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LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM.JKT AREA NO.	STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 474G			56J10-5 56TB3-B5					.10 .20	NO NO		49 66	
A 474R			56J10-4 56TB3-B3					.10 .20	NO NO		49 66	
A 474Y			56J10-3 56TB3-B4					.10 .20	NO NO		49 66	
A 475	4	61.00	56J10-12 56TB1-F8					.10 .20	NO NO		49 65	
A 476	4	48.00	56J10-70 56J21-3					.10 .10	NO NO		49 49	A
A 477	4	48.00	56J10-57 56J21-108					.10 .10	NO NO		49 49	
A 478	4	61.00	56J10-9 56TB1-H5					.10 .20	NO NO		49 64	
A 479	78	61.00									32 32	
A 479G			56J10-22 56TB1-K3					.10 .20	NO NO		49 65	
A 479R			56J10-24 56TB1-K5					.10 .20	NO NO		49 65	
A 479Y			56J10-21 56TB1-K4					.10 .20	NO NO		49 65	
A 480	78	61.00									32 32	

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LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM.JKT AREA NO.	STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 480G			56J10-23 56TB1-K8					.10 .20	NO NO		49 65	
A 480R			56J10-25 56TB1-K6					.10 .20	NO NO		49 65	
A 480Y			56J10-26 56TB1-K7					.10 .20	NO NO		49	
A 481	4	48.00	56J10-59 56J21-40					.10 .10	NO NO		49 49	
A 482	77	48.00									32 32	
A 482R			56J10-32 56J21-80					.10 .10	NO NO		49 49	A
A 482Y			56E23 56J21-81					.20 .10	NO NO		28 49	A
A 483	77	48.00									32 32	
A 483R			56J10-17 56J21-6					.10 .10	NO NO		49 49	A
A 483Y			56E23 56J21-7					.20 .10	NO NO		 49	A
A 484	77	48.00									32 32	
A 484R			56J10-18 56J21-214					.10 .10	NO NO		49 49	A

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LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM.JKT AREA NO.	STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 484Y			56E23 56J21-215					.20 .10	NO NO		 49	A
A 485	77	48.00									32 32	
A 485R			56J10-40 56J21-179					.10 .10	NO NO		49 49	A
A 485Y			56E23 56J21-180					.20 .10	NO NO		 49	A
A 486	77	48.00									32 32	
A 486R			56J10-41 56J21-146					.10 .10	NO NO		49 49	A
A 486Y			56E23 56J21-147					.20 .10	NO NO		 49	A
A 487	77	48.00									32 32	
A 487R			56J10-19 56J21-113					.10 .10	NO NO		49 49	A
A 487Y			56E23 56J21-114					.20 .10	NO NO		 49	A
A 488	77	48.00									32 32	
A 488R			56J10-33 56J21-45					.10 .10	NO NO		49 49	A

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LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 488Y			56E23 56J21-46					.20 .10	NO NO		49	A
A 489	77	48.00									32 32	
A 489R			56J10-44 56J21-8					.10 .10	NO NO		49 49	A
A 489Y			56E24 56J21-9					.20 .10	NO NO		49	A
A 490	77	48.00									32 32	
A 490R			56J10-43 56J21-216					.10 .10	NO NO		49 49	A
A 490Y			56E24 56J21-217					.20 .10	NO NO		49	A
A 491	77	48.00									32 32	
A 491R			56J10-53 56J21-181					.10 .10	NO NO		49 49	A
A 491Y			56E24 56J21-182					.20 .10	NO NO		49	A
A 492	77	48.00									32 32	
A 492R			56J10-51 56J21-148					.10 .10	NO NO		49 49	A

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LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 492Y			56E24 56J21-149					.20 .10	NO NO		49	A
A 493	77	48.00									32 32	
A 493R			56J10-64 56J21-115					.10 .10	NO NO		49 49	A
A 493Y			56E24 56J21-116					.20 .10	NO NO		49	A
A 494	77	48.00									32 32	
A 494R			56J10-73 56J21-210					.10 .10	NO NO		49 49	A
A 494Y			56E22 56J21-211					.20 .10	NO NO		28 49	A
A 495	77	48.00									32 32	
A 495R			56J10-74 56J21-175					.10 .10	NO NO		49 49	A
A 495Y			56E22 56J21-176					.20 .10	NO NO		49	A
A 496	77	48.00									32 32	
A 496R			56J10-60 56J21-142					.10 .10	NO NO		49 49	A

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LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 496Y			56E22 56J21-143					.20 .10	NO NO		28 49	A
A 497	77	48.00									32 32	
A 497R			56J10-28 56J21-109					.10 .10	NO NO		49 49	A
A 497Y			56E22 56J21-110					.20 .10	NO NO		49	A
A 498	77	48.00									32 32	
A 498R			56J10-29 56J21-76					.10 .10	NO NO		49 49	A
A 498Y			56E22 56J21-77					.20 .10	NO NO		49	A
A 499	77	48.00									32 32	
A 499R			56J10-30 56J21-41					.10 .10	NO NO		49 49	A
A 499Y			56E22 56J21-42					.20 .10	NO NO		49	A
A 500	77	48.00									32 32	
A 500R			56J10-61 56J21-212					.10 .10	NO NO		49 49	A

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LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 500Y			56E22 56J21-213					.20 .10	NO NO		49	A
A 501	77	48.00									32 32	
A 501R			56J10-62 56J21-177					.10 .10	NO NO		49 49	A
A 501Y			56E22 56J21-178					.20 .10	NO NO		49	A
A 502	77	48.00									32 32	
A 502R			56J10-63 56J21-144					.10 .10	NO NO		49 49	A
A 502Y			56E22 56J21-145					.20 .10	NO NO		49	A
A 503	77	48.00									32 32	
A 503R			56J10-14 56J21-111					.10 .10	NO NO		49 49	A
A 503Y			56E23 56J21-112					.20 .10	NO NO		49	A
A 504	77	48.00									32 32	
A 504R			56J10-16 56J21-43					.10 .10	NO NO		49 49	A

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LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM.JKT AREA NO.	STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 504Y			56E23 56J21-44					.20 .10	NO NO		 49	A
A 505	77	48.00									32 32	
A 505R			56J10-31 56J21-4					.10 .10	NO NO		49 49	A
A 505Y			56E22 56J21-5					.20 .10	NO NO		 49	A
A 506	77	48.00									32 32	
A 506R			56J10-15 56J21-78					.10 .10	NO NO		49 49	A
A 506Y			56E23 56J21-79					.20 .10	NO NO		 49	A
A 5C7	4	49.00	56J10-8 56TB3-M22					.10 .20	NO NO		49 65	
A 508	4	61.00	56J10-10 56TB1-G5					.10 .20	NO NO		49 64	
A 509	4	48.00	56J10-58 56J21-39					.10 .10	NO NO		49 49	
A 510	77	48.00									32 32	
A 510R			56J10-39 56J21-14					.10 .10	NO NO		49 49	B

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LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM.JKT AREA NO.	STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 510Y			56E25 56J21-15					.20 .10	NO NO		 49	B
A 511	77	48.00									32 32	
A 511R			56J10-37 56J21-117					.10 .10	NO NO		49 49	B
A 511Y			56E25 56J21-118					.20 .10	NO NO		 49	B
A 512	4	48.00	56J10-56 56J21-173					.10 .10	NO NO		49 49	
A 513	4	48.00	56J10-55 56J21-174					.10 .10	NO NO		49 49	
A 514	77	48.00									32 32	
A 514R			56J10-35 56J21-183					.10 .10	NO NO		49 49	B
A 514Y			56E25 56J21-184					.20 .10	NO NO		 49	B
A 515	77	48.00									32 32	
A 515R			56J10-47 56J21-185					.10 .10	NO NO		49 49	B
A 515Y			56E25 56J21-186					.20 .10	NO NO		 49	B

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LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM.JKT AREA NO.	STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 516	77	48.00									32 32	
A 516R			56J10-34 56J21-218					.10 .10	NO NO		49 49	B
A 516Y			56E25 56J21-219					.20 .10	NO NO		 49	B
A 517	77	48.00									32 32	
A 517R			56J10-48 56J21-220					.10 .10	NO NO		49 49	B
A 517Y			56E25 56J21-221					.20 .10	NO NO		 49	B
A 520	4	48.00	56J10-75 56J21-209					.10 .10	NO NO		49 49	A
A 521	4	61.00	56J10-13 56TB1-K7					.10 .20	NO NO		49 66	
A 522	4	48.00	56J10-45 56J21-10					.10 .10	NO NO		49 49	B
A 523	4	48.00	56J10-46 56J21-11					.10 .10	NO NO		49 49	B
A 548	4	12.00	56TB3-820 56E12					.20 .20	NO NO		66	
A 549	4	55.00	56E20 56TB2-D6					.20 .20	NO NO		 66	

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LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM.JKT AREA NO.	STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 550	4	49.00	56E21 56TB2-D5					.20 .20	NO NO			
A 551	4	12.00	56E25 56J10-69					.20 .10	NO NO		 49	B
A 552	4	12.00	56E24 56J10-82					.20 .10	NO NO		 49	A
A 554	4	12.00	56E23 56E22					.20 .20	NO NO			A
A 555	4	12.00	56E23 56E24					.20 .20	NO NO			A
A 556	4	40.00	56E19 56TB1-S7					.20 .20	NO NO		 64	
A 557	4	40.00	56E8 56TB2-D1					.20 .20	NO NO		 64	
A 558	77	40.00									32 32	
A 558R			56E14 56TB2-K1					.20 .20	NO NO		 66	
A 558Y			56E13 56TB2-L1					.20 .20	NO NO		 66	
A 559	4	12.00	56TB3-S21 56E6					.20 .20	NO NO		65	
A 560	77	40.00									32 32	

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SCALE-NONE
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LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 560R			56E17 56TB1-H7					.20 .20	NO NO		65	
A 560Y			56E16 56TB1-G7					.20 .20	NO NO		65	
A 561	77	40.00									32 32	
A 561R			56E9 56TB1-S1					.20 .20	NO NO		65	
A 561Y			56E10 56TB1-S2					.20 .20	NO NO			
A 564	77	40.00									32 32	
A 564R			56E3 56TB1-G4					.20 .20	NO NO		65	
A 564Y			56E4 56TB1-H4					.20 .20	NO NO		65	
A 565	4	50.00	56J8-50 56TB1-F1					.10 .20	NO NO		49 65	
A 566	4	18.00	56E44 56E57					.20 .20	NO NO			
A 567	77	47.00									32 32	
A 567R			56E7 56TB3-D2					.20 .20	NO NO		27 65	

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LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 567Y			56E11 56TB3-C3					.20 .20	NO NO		66	
A 568	4	12.00	56J21-187 56E64					.10 .20	NO NO		49	
A 569	4	12.00	56E82 56E65					.20 .20	NO NO			
A 570	4	12.00	56E82 56E62					.20 .20	NO NO		31, 81	
A 571	4	12.00	56J21-107 56E63					.10 .20	NO NO		49	
A 572	77	12.00									32 32	
A 572R			56J1-1 56E1					.10 .20	NO NO		49 28	
A 572Y			56J1-14 56E2					.10 .20	NO NO		49 27	
A 573	78	12.00									32 32	
A 573G			56J1-11 56E1					.10 .20	NO NO		49	
A 573R			56J1-25 56E1					.10 .20	NO NO		49	
A 573Y			56J1-12 56E5					.10 .20	NO NO		49 27	

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LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 574	77	12.00									32 32	
A 574R			56J2-1 56E1					.10 .20	NO NO		49	
A 574Y			56J2-14 56E2					.10 .20	NO NO		49	
A 575	78	12.00									32 32	
A 575G			56J2-11 56E1					.10 .20	NO NO		49	
A 575R			56J2-25 56E1					.10 .20	NO NO		49	
A 575Y			56J2-12 56E5					.10 .20	NO NO		49	
A 576	78	12.00									32 32	
A 576G			56J3-11 56E1					.10 .20	NO NO		49	
A 576R			56J3-25 56E1					.10 .20	NO NO		49	
A 576Y			56J3-12 56E5					.10 .20	NO NO		49	
A 577	78	40.00									32 32	

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REV LTR A

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 577G			56E5 56TB2-H5					.20 .20	NO NO		64	
A 577R			56E1 56TB2-G4					.20 .20	NO NO		66	
A 577Y			56E2 56TB2-H4					.20 .20	NO NO		65	
A 578	77	12.00									32 32	
A 578R			56J1-3 56E7					.10 .20	NO NO		49	
A 578Y			56J1-2 56E11					.10 .20	NO NO		49 27	
A 579	77	12.00									32 32	
A 579R			56J2-3 56E7					.10 .20	NO NO		49	
A 579Y			56J2-2 56E11					.10 .20	NO NO		49	
A 580	77	12.00									32 32	
A 580R			56J3-3 56E7					.10 .20	NO NO		49	
A 580Y			56J3-2 56E11					.10 .20	NO NO		49	

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LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 581	4	12.00	56J3-16 56E6					.10 .20	NO NO		49	
A 582	4	12.00	56J3-15 56E8					.10 .20	NO NO		49	
A 583	77	12.00									32 32	
A 583R			56J5-50 56E17					.10 .20	NO NO		49	
A 583Y			56J5-60 56E16					.10 .20	NO NO		49	
A 584	78	12.00									32 32	
A 584G			56J4-12 56E14					.10 .20	NO NO		49	
A 584R			56J4-25 56E13					.10 .20	NO NO		49 28	
A 584Y			56J4-11 56E13					.10 .20	NO NO		49	
A 585	78	12.00									32 32	
A 585G			56J5-17 56E14					.10 .20	NO NO		49	
A 585R			56J5-4 56E13					.10 .20	NO NO		49	

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LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 585Y			56J5-18 56E13					.10 .20	NO NO		49	
A 586	77	12.00									32 32	
A 586R			56J5-1 56E14					.10 .20	NO NO		49	
A 586Y			56J5-14 56E13					.10 .20	NO NO		49	
A 587	4	6.00	56TB1-N4 56TB1-N5					.20 .20	NO NO		66	
A 588	4	6.00	56TB1-N5 56TB1-N8					.20 .20	NO NO		66	
A 591	4	6.00	56TB3-T3 56TB3-R3					.20 .20	NO NO		66	
A 592	4	6.00	56TB3-R3 56TB3-N3					.20 .20	NO NO		66	
A 593	4	6.00	56TB3-D15 56TB3-L20					.20 .20	NO NO		66 65	
A 594	4	6.00	56TB3-L22 56TB3-D15					.20 .20	NO NO		65	
A 595	4	6.00	56TB3-K20 56TB3-C15					.20 .20	NO NO		65	
A 596	4	6.00	56TB3-K22 56TB3-C15					.20 .20	NO NO		65 66	

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LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 598	77	47.00									32 32	
A 598R			56P5-D 56TB2-U2					.20 .20	NO NO		52 65	
A 598Y			56P5-E 56TB2-T3					.20 .20	NO NO		52 65	
A 599	77	39.00									32 32	
A 599R			56J4-3 56TB2-U1					.10 .18	NO NO		49	
A 599Y			56J4-2 56TB2-T2					.10 .20	NO NO		49	
A 600	77	41.00									32 32	
A 600R			56J5-3 56TB2-U1					.10 .20	NO NO		49 65	
A 600Y			56J5-2 56TB2-T2					.10 .20	NO NO		49 66	
A 601	4	6.00	56TB2-L4 56TB2-M4					.20 .20	NO NO		66 65	
A 602	75	48.00									31 31	
A 602G			56P1-106 56TB1-N1					.10 .20	NO NO		49	

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LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 602N			56P1-90 56TB1-M1					.10 .20	NO NO		49	
A 602R			56P1-103 56TB1-R1					.10 .20	NO NO		49	
A 602Y			56P1-108 56TB1-T1					.10 .20	NO NO		49 66	
A 603	75	50.00									31 31	
A 603G			56J8-46 56TB1-R3					.10 .20	NO NO		49	
A 603N			56J8-19 56TB1-R2					.10 .20	NO NO		49	
A 603R			56J8-55 56TB1-N3					.10 .20	NO NO		49	
A 603Y			56J8-36 56TB1-R2					.10 .20	NO NO		49	
A 604	73	53.00									32 32	
A 604R			56J9-55 56TB1-N3					.10 .20	NO NO		49 65	
A 604Y			56J9-46 56TB1-R3					.10 .20	NO NO		49 65	
A 605	75	53.00									31 31	

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LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 605G			56J9-64 56TB1-N1					.10 .20	NO NO		49 65	
A 605N			56J9-63 56TB1-M1					.10 .20	NO NO		49 65	
A 605R			56J9-54 56TB1-R1					.10 .20	NO NO		49 65	
A 605Y			56J9-84 56TB1-K1					.10 .20	NO NO		49 65	
A 606	75	42.00									31 31	
A 606G			56J9-53 56P10-107					.10 .10	NO NO		49 49	
A 606N			56J9-52 56P10-108					.10 .10	NO NO		49 49	
A 606R			56J9-61 56P10-106					.10 .10	NO NO		49 49	
A 606Y			56J9-62 56P10-93					.10 .10	NO NO		49 49	
A 607	73	42.00									32 32	
A 607R			56P10-69 56TB3-L14					.10 .20	NO NO		49	
A 607Y			56P10-68 56TB3-K14					.10 .20	NO NO		49	

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LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 608	73	28.00									32 32	
A 608R			56P11-N 56TB3-L14					.25 .20	NO NO		53 65	
A 608Y			56P11-K 56TB3-K14					.25 .20	NO NO		53 65	
A 609	5	28.00	56P11-B 56TB3-C20					.25 .20	NO NO		53	
A 610	5	28.00	56P11-B 56TB3-C20					.25 .20	NO NO			
A 611	5	28.00	56P11-B 56TB3-C20					.25 .20	NO NO		66	
A 612	5	28.00	56P11-C 56TB3-C21					.25 .20	NO NO		53	
A 613	5	28.00	56P11-C 56TB3-C21					.25 .20	NO NO			
A 614	5	28.00	56P11-C 56TB3-C21					.25 .20	NO NO		66	
A 615	5	28.00	56P12-B 56TB3-D20					.25 .20	NO NO		53	
A 616	5	28.00	56P12-B 56TB3-D20					.25 .20	NO NO			
A 617	5	28.00	56P12-B 56TB3-D20					.25 .20	NO NO		66	

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LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 618	5	28.00	56P12-C 56TB3-D21					.25 .20	NO NO		53	
A 619	5	28.00	56P12-C 56TB3-D21					.25 .20	NO NO			
A 620	5	28.00	56P12-C 56TB3-D21					.25 .20	NO NO		66	
A 621	5	28.00	56P12-M 56TB3-C22					.25 .20	NO NO		53	
A 622	5	28.00	56P12-M 56TB3-C22					.25 .20	NO NO		65	
A 623	5	28.00	56P11-M 56TB3-D22					.25 .20	NO NO		53	
A 624	5	28.00	56P11-M 56TB3-D22					.25 .20	NO NO		65	
A 625	5	28.00	56P11-H 56TB3-H21					.25 .20	NO NO		53	
A 626	5	28.00	56P11-H 56TB3-H21					.25 .20	NO NO			
A 627	5	28.00	56P11-H 56TB3-H21					.25 .20	NO NO		66	
A 628	5	28.00	56P12-H 56TB3-H22					.25 .20	NO NO		53	
A 629	5	28.00	56P12-H 56TB3-H22					.25 .20	NO NO			

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LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 630	5	28.00	56P12-H 56TB3-H22					.25 .20	NO NO		66	
A 631	5	28.00	56P11-L 56TB3-F21					.25 .20	NO NO		53 66	
A 632	5	28.00	56P12-L 56TB3-F22					.25 .20	NO NO		53 66	
A 633	5	28.00	56P11-A 56TB3-G21					.25 .20	NO NO		53 64	
A 634	5	35.00	56P11-A 56J21-1					.25 .10	NO NO		49	
A 635	5	35.00	56P11-A 56J21-73					.25 .10	NO NO		49	
A 636	5	28.00	56P12-A 56TB3-G22					.25 .20	NO NO		53 64	
A 637	5	35.00	56P12-A 56J21-139					.25 .10	NO NO		49	
A 638	5	35.00	56P12-A 56J21-207					.25 .10	NO NO		49	
A 639	5	35.00	56P11-J 56J21-2					.25 .10	NO NO		53 49	
A 640	5	35.00	56P11-J 56J21-74					.25 .10	NO NO		49	
A 641	5	35.00	56P12-J 56J21-140					.25 .10	NO NO		53 49	

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LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM.JKT AREA NO.	STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 642	5	35.00	56P12-J					.25	NO			
			56J21-208					.10	NO		49	
A 643	5	28.00	56P11-G					.25	NO		53	
			56TB3-D15					.20	NO			
A 644	5	28.00	56P11-G					.25	NO			
			56TB3-K20					.20	NO			
A 645	5	28.00	56P11-G					.25	NO			
			56TB3-L21					.20	NO		65	
A 646	5	28.00	56P12-G					.25	NO		53	
			56TB3-C15					.20	NO			
A 647	5	28.00	56P12-G					.25	NO			
			56TB3-K22					.20	NO			
A 648	5	28.00	56P12-G					.25	NO			
			56TB3-L20					.20	NO			
A 649	5	39.00	56P11-D					.25	NO		53	
			56TB1-N8					.20	NO			
A 650	5	39.00	56P11-D					.25	NO			
			56TB1-S6					.20	NO			
A 651	5	35.00	56P11-F					.25	NO		53	
			56TB2-M3					.20	NO		64	
A 652	5	35.00	56P11-F					.25	NO			
			56TB2-D4					.20	NO		65	
A 653	5	28.00	56P11-F					.25	NO			
			56TB3-N3					.20	NO			

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LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM.JKT AREA NO.	STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 654	5	35.00	56P11-E					.25	NO		53	
			56TB2-M7					.20	NO		64	
A 655	5	35.00	56P11-E					.25	NO			
			56TB2-V4					.20	NO			
A 656	5	39.00	56P12-D					.25	NO		53	
			56TB1-N4					.20	NO			
A 657	5	28.00	56P12-D					.25	NO			
			56TB3-S3					.20	NO			
A 658	5	28.00	56P12-E					.25	NO		53	
			56TB3-T3					.20	NO			
A 659	5	39.00	56P12-E					.25	NO			
			56TB1-S3					.20	NO			
A 660	5	35.00	56P12-F					.25	NO		53	
			56TB2-M1					.20	NO		64	
A 661	5	35.00	56P12-F					.25	NO			
			56TB2-L4					.20	NO			
A 662	5	39.00	56P12-F					.25	NO			
			56TB1-D7					.20	NO			
A 663	74	54.00									32	
											32	
A 663G			56P10-81					.10	NO		49	
			56TB1-T2					.20	NO		66	
A 663R			56P10-94					.10	NO		49	
			56TB1-R2					.20	NO		66	

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS
SIZE A
1023055
SCALE-NONE
REV LTR A
SHEET 118 OF 120

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM.JKT AREA NO.	STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 663Y			56P10-95					.10	NO		49	
			56TB1-S2					.20	NO		66	
A 664	4	6.00	56TB3-B15					.20	NO		65	
			56TB3-T15					.20	NO			
A 665	4	42.00	56P10-1					.10	NO		49	
			56TB3-B20					.20	NO			
A 667	4	40.00	56J9-15					.10	NO		49	
			56TB3-F1					.18	NO		65	
A 668	4	40.00	56J9-14					.10	NO		49	
			56TB3-F2					.18	NO		64	
A 669	77	49.00									32	
											32	
A 669R			56J9-96					.10	NO		49	
			56TB2-U3					.18	NO		66	
A 669Y			56J9-82					.10	NO		49	
			56TB2-U2					.18	NO			
A 670	77	40.00									32	
											32	
A 670R			56J9-49					.10	NO		49	
			56TB3-B16					.18	NO			
A 670Y			56J9-38					.10	NO		49	
			56TB3-B17					.18	NO			
A 671	1	40.00			1.00	.75					32	
					2.50	2.25					32, 28	

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS
SIZE A
1023055
SCALE-NONE
REV LTR A
SHEET 119 OF 120

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM.JKT AREA NO.	STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 671B	76	12.00	56TB3-F8					.20	NO		65	
			SHLD A671					.20	NO			
A 671Y			56J9-48					.10	NO		49	
			56TB3-G8					.18	NO		64	
A 672	1	40.00			1.00	.75					32	
					2.50	2.25					32, 28	
A 672B	76	12.00	56TB3-F7					.20	NO		65	
			SHLD A672					.20	NO			
A 672Y			56J9-56					.10	NO		49	
			56TB3-G7					.18	NO		64	
A 673	4	40.00	56J9-47					.10	NO		49	
			56TB3-A10					.18	NO		64	

MANNED SPACECRAFT CENTER
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SCALE-NONE
REV LTR A
SHEET 120 OF 120

APPLICATION		REVISIONS			
NEXT ASSY	USED ON	SYM	DESCRIPTION	DATE	APPROVAL
1014606-041		A	INITIAL RELEASE CLASS A PER TDRR 26127	13 JAN 66	WK
		B	REVISED PER TDRR28404	9 MAY 66	JJJ / JRS

	REV	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
	SHEET	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46
REV STATUS	REV					B	A	A	A	A	B	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	
OF SHEETS	SHEET					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20		

AC ELECTRONICS DIVISION
GENERAL MOTORS CORP. MILWAUKEE WIS.

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

DRAWN L Krahn DATE 21 OCT 65
CHECKED N.E. Abraham FEB 8 '66
APPROVAL BC Watson FEB 8, 66
APPROVAL 2/9/66
NASA APPROVAL A. C. METZGER
MIT APPROVAL 10 Feb 66
CONTRACT NAS9-497

WIRING HARNESS "A"
AGE INTERCONNECT

CODE IDENT NO. 99974
SIZE
1023055
REV B
SCALE
SHEET 1 OF 120

REVISION STATUS OF SHEETS

SH	REV	SH	REV	SH	REV	SH	REV	SH	REV	SH	REV	SH	REV	SH	REV	SH	REV
47	A	81	A	115	A												
48	A	82	A	116	A												
49	A	83	A	117	A												
50	A	84	A	118	A												
51	A	85	A	119	A												
52	A	86	A	120	A												
53	A	87	A														
54	A	88	A														
55	A	89	A														
56	A	90	A														
57	A	91	A														
58	A	92	A														
59	A	93	A														
60	A	94	A														
61	A	95	A														
62	A	96	A														
63	A	97	A														
64	A	98	A														
65	A	99	A														
66	A	100	A														
67	A	101	A														
68	A	102	A														
69	A	103	A														
70	A	104	A														
71	A	105	A														
72	A	106	A														
73	A	107	A														
74	A	108	A														
75	A	109	A														
76	A	110	A														
77	A	111	A														
78	A	112	A														
79	A	113	A														
80	A	114	A														

SIZE A
CODE IDENT. NO. 99974
1023055
SCALE NONE
REV LTR A
SHEET 2 OF 120

MIL 1377A3 8-65

NOTE NUMBER	GENERAL NOTES DESCRIPTION
1	NOT APPLICABLE
3	INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327.
4	MARK LEAD IDENTIFICATION PER ND1002019.
5	MARK LEAD IDENTIFICATION ON SINGLE CONDUCTORS PER ND1002019 OMITTING ALL SUFFIX LETTERS EXCEPT A AND B. SUFFIX LETTERS ON SINGLE LEAD INDICATE TWISTING ONLY.
6	SPACING OF LEAD IDENTIFICATION MARKING SHALL BE EVERY 1.2 INCHES
7	SPIRALLING OF THE MARKING IS ALLOWED.
8	MARK SLEEVING OF MULTI-LEADS WITH THE LEADS NUMBER .12 INCH HIGH, COLOR BLACK, PER ND1002019
13	LENGTHS SPECIFIED ARE FOR LEADS BEFORE ATTACHING TO AN ACCESSORY.
14	LEAD LENGTHS ARE FOR MFG REFERENCE ONLY.
15	A LETTER WITH AN ASTERISK SUFFIX INDICATES A LOWER CASE LETTER.
17	LACE HARNESS PER ND1002032 USING ITEM 51.
18	LEADS LISTED WITH AN A OR B IN THE DETAIL COLUMN ARE TO BE ASSEMBLED PER DETAIL A OR B AS SHOWN ON THE CONFIGURATION DRAWING (1014606 REF).
19	SOLDER PER MIL-S-6872 (ES2505-1) USING ITEMS 50 AND 58, OR 44.

MANNED SPACECRAFT CENTER HOUSTON, TEXAS	SIZE A	1023055
SCALE-NONE	REV LTR / A	SHEET 3 OF 120

NOTE NUMBER	GENERAL NOTES DESCRIPTION
20	THE SUFFIX LETTER OF A LEAD IDENTIFICATION NUMBER INDICATES LEAD SHIELDING, COLOR, MARKING OR TWISTING A - FROM END SHIELD B - TO END SHIELD G - GREEN K - BLACK L - BLUE N - BROWN R - RED W - WHITE Y - YELLOW
21	ASSEMBLE HARNESS AS SHOWN PER CONFIGURATION DRAWING (1014606 REF).
22	SERIALIZE PER ND1002023.
23	VENDOR ITEM - SEE SPECIFICATION CONTROL DRAWING
24	VENDOR ITEM - SEE SOURCE CONTROL DRAWING.

MANNED SPACECRAFT CENTER HOUSTON, TEXAS	SIZE A	1023055
SCALE-NONE	REV LTR / A	SHEET 4 OF 120

NOTE NUMBER GENERAL NOTES DESCRIPTION

TOLERANCE CHART, UNLESS OTHERWISE SPECIFIED ---

APPLICABLE LENGTH FOR STRIP WIRE, STRIP JACKET, CUT WIRE OR CUT SHIELD.	TOLERANCE STRIP WIRE	TOLERANCE STRIP JACKET	TOLERANCE CUT WIRE	TOLERANCE CUT SHIELD
UNDER 1 INCH	+.03-.00	+.06-.06	+.06-.06	+.06-.06
1 INCH TO 6 INCHES	+.06-.00	+.25-.25	+.25-.25	+.25-.25
6 INCHES TO 6 FEET		+.50-.50	+.50-.50	+.50-.50

MANNED SPACECRAFT CENTER HOUSTON, TEXAS	SIZE A	1023055
SCALE-NONE	REV LTR / A	SHEET 5 OF 120

LIST OF MATERIALS

SEE NOTE NUMBER	ITEM	QTY	PART NO.	DESCRIPTION
	1	1	1023055-001	WIRE PER 1010789-011 YEL JKT 24AWG YEL 13 FEET 0.0 INCHES TOTAL LENGTH
	2	1	1023055-002	WIRE PER 1010789-012 YEL JKT 24AWG YEL, RED 376 FEET 11.0 INCHES TOTAL LENGTH
	3	1	1023055-003	WIRE PER 1010789-013 YEL JKT 24AWG YEL, RED, GREEN 30 FEET 4.0 INCHES TOTAL LENGTH
	4	1	1023055-004	WIRE PER 1010789-001 24AWG YELLOW 878 FEET 11.0 INCHES TOTAL LENGTH
	5	1	1023055-005	WIRE PER 1010789-006 22AWG YELLOW 138 FEET 9.0 INCHES TOTAL LENGTH
	6	1	1023055-006	WIRE PER 1010707-1 (3 COND TWISTED SHIELDED) 26 FEET 6.0 INCHES TOTAL LENGTH
23	7	3	1010824- 1	CONNECTOR RECP ELECTRICAL
23	8	5	1010824- 2	CONNECTOR RECP ELECTRICAL
23	9	1	1010822- 1	CONNECTOR RECP ELECTRICAL
23	10	2	1010822- 3	CONNECTOR RECP ELECTRICAL
23	11	1	1010816-144	CONNECTOR RECP ELECTRICAL
23	12	1	1010816-244	CONNECTOR RECP ELECTRICAL
23	13	1	1010348- 1	CONNECTOR PLUG ELECTRICAL
23	14	1	1010348- 2	CONNECTOR PLUG ELECTRICAL
23	17	1	1010674- 1	CONNECTOR PLUG ELECTRICAL

SIZE A	CODE IDENT NO.	1023055
SCALE-NONE	REV LTR B	SHEET 6 OF 120

SEE NOTE LIST OF MATERIALS

NUMBER	ITEM	QTY	PART NO.	DESCRIPTION
23	18	1	1010674- 2	CONNECTOR PLUG ELECTRICAL
23	19	1	1010674- 3	CONNECTOR PLUG ELECTRICAL
23	20	1	1010674- 4	CONNECTOR PLUG ELECTRICAL
23	27	16	1010402- 1	SLEEVE, SOLDER
23	28	137	1010402- 2	SLEEVE, SOLDER
23	31	249	1010490-110	INSULATION-SLEEVING, ELECTRICAL, HEAT SHRINKABLE (WHITE)
23	32	316	1010490-112	INSULATION-SLEEVING, ELECTRICAL, HEAT SHRINKABLE (WHITE)
23	38	1	1010490-975	INSULATION-SLEEVING, ELECTRICAL, HEAT SHRINKABLE (WHITE) 36 INCHES TOTAL LENGTH
23	39	1	1010490-979	INSULATION-SLEEVING, ELECTRICAL, HEAT SHRINKABLE (WHITE) 36 INCHES TOTAL LENGTH
23	40	2	1010490-216	INSULATION-SLEEVING, ELECTRICAL, HEAT SHRINKABLE (WHITE)
23	41	2	1010490-222	INSULATION-SLEEVING, ELECTRICAL, HEAT SHRINKABLE (WHITE)
	42	1	1023055-007	WIRE, BRAID PER QQ-B-575 (COPPER, TIN-COATED, TUBLAR) SIZE 3/8 ID, 36 GAUGE, 36 INCHES TOTAL LENGTH
	43	1	1023055-008	WIRE, BRAID PER QQ-B-575 (COPPER, TIN-COATED, TUBLAR) SIZE 1/2 ID, 36 GAUGE, 36 INCHES TOTAL LENGTH

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS
SIZE A
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SCALE-NONE REV LTR A

SEE NOTE LIST OF MATERIALS

NUMBER	ITEM	QTY	PART NO.	DESCRIPTION
23	45	1	1000243- 34	FERRULE, INNER ELECTRICAL CONDUCTOR
23	46	1	1000243- 26	FERRULE, INNER ELECTRICAL CONDUCTOR
23	47	1	1000242- 30	FERRULE, OUTER ELECTRICAL CONDUCTOR
23	49	1638	1010738- 6	CONTACT, SOCKET
24	51	AR	1012507-004	TAPE, LACING AND TYING
	52	REF		CONTACT SOCKETS SUPPLIED WITH 1010348
	53	REF		CONTACT SOCKETS SUPPLIED WITH 1010671
	54	REF		CONTACT SOCKETS SUPPLIED WITH 1021714
23	59	1	1000242- 24	FERRULE, OUTER ELECTRICAL CONDUCTOR
23	60	1	1000243- 30	FERRULE, INNER ELECTRICAL CONDUCTOR
23	61	1	1000242- 27	FERRULE, OUTER ELECTRICAL CONDUCTOR
23	62	1	1000243- 36	FERRULE, INNER ELECTRICAL CONDUCTOR
23	63	1	1000242- 33	FERRULE, OUTER ELECTRICAL CONDUCTOR
23	64	263	1010743- 1	WRAPOST RECEPTACLE
23	65	136	1010743- 2	WRAPOST RECEPTACLE
23	66	84	1010743- 3	WRAPOST RECEPTACLE
23	67	1	1010734- 16	GROMMET, CONNECTOR STRAIN RELIEF
23	68	1	1010734- 18	GROMMET, CONNECTOR STRAIN RELIEF

MANNED SPACECRAFT CENTER
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SCALE-NONE REV LTR A

SEE NOTE LIST OF MATERIALS

NUMBER	ITEM	QTY	PART NO.	DESCRIPTION
23	69	12	1010770- 2	CONTACT SOCKET
23	70	1	1010809-001	CONNECTOR, PLUG ELECTRICAL
	71	1	1021714-001	CONNECTOR, PLUG ELECTRICAL
	72	1	1021714-002	CONNECTOR, PLUG ELECTRICAL
	73	1	1023055-009	WIRE PER 1010789-008 22AWG YELLOW, RED 10 FEET 3.0 INCHES TOTAL LENGTH
	74	1	1023055-010	WIRE PER 1010789-009 22AWG YEL, RED, GREEN 54.0 INCHES TOTAL LENGTH
	75	1	1023055-011	WIRE PER 1010789-010 22AWG YEL, RED, GREEN BROWN 16 FT 1.0 IN. TOTAL LENGTH
	76	1	1023055-012	WIRE PER 1010789-002 24AWG BLACK 119 FEET 0.0 INCHES TOTAL LENGTH
	77	1	1023055-013	WIRE PER 1010789-003 24AWG YEL, RED . 420 FEET 0.0 INCHES TOTAL LENGTH
	78	1	1023055-014	WIRE PER 1010789-004 24AWG YEL, RED, GREEN 86 FEET 4.0 INCHES TOTAL LENGTH
	79	1	1023055-015	WIRE PER 1010789-005 24AWG YELLOW, RED GREEN, BROWN 15 FT 5.0 IN. TOTAL LENGTH
23	80	1	1010824- 5	CONNECTOR RECP ELECTRICAL
	81	1	1015902- 3	LUG TERMINAL

MANNED SPACECRAFT CENTER
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SCALE-NONE REV LTR A

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 1	77	39.00									32 32	
A 1R			56P1-80 56TB2-A2					.10 .20	NO NO		49	
A 1Y			56P1-95 56TB2-A1					.10 .20	NO NO		49	
A 2	4	48.00	56P1-65 56TB3-L1					.10 .20	NO NO		49	
A 3	4	38.00	56P1-38 56TB1-K4					.10 .20	NO NO		49	
A 4	4	38.00	56P1-48 56TB1-K3					.10 .20	NO NO		49	
A 5	4	38.00	56P1-13 56TB1-K5					.10 .20	NO NO		49	
A 6	4	38.00	56P1-27 56TB1-K8					.10 .20	NO NO		49	
A 7	4	38.00	56P1-58 56TB1-K6					.10 .20	NO NO		49	
A 8	4	39.00	56P1-12 56TB2-B2					.10 .20	NO NO		49 64	
A 9	4	39.00	56P1-57 56TB2-R4					.10 .20	NO NO		49 64	
A 10	4	39.00	56P1-5 56TB2-C1					.10 .20	NO NO		49 64	

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SCALE-NONE REV LTR A

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 11	4	39.00	56P1-69 56TB2-B1					.10 .20	NO NO		49 64	
A 12	4	48.00	56P1-24 56TB3-F4					.10 .20	NO NO		49	
A 13	2	39.00			3.00 2.50	2.75 2.25					31 31, 28	
A 13B	76	12.00	56TB2-D3 SHLD A13					.20 .20	NO NO			
A 13R			56E61 56TB2-F3					.20 .20	NO NO		28	
A 13Y			56P1-68 56TB2-D2				2.00	.10 .20	NO NO		49	
A 14	2	51.00			3.00 1.00	2.75 .75					31 31, 28	
A 14B	76	12.00	56E44 SHLD A14					.20 .20	NO NO		28	
A 14R			56E61 56J21-155					.20 .10	NO NO		 49	
A 14Y			56P1-59 56J21-154				2.00	.10 .10	NO NO		49 49	
A 15	2	51.00			3.00 1.00	2.75 .75					31 31, 28	
A 15B	76	12.00	56E44 SHLD A15					.20 .20	NO NO			

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SCALE-NONE | REV LTR A | SHEET 11 OF 120

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 15R			56E61 56J21-223					.20 .10	NO NO		 49	
A 15Y			56P1-49 56J21-222				2.00	.10 .10	NO NO		49 49	
A 16	2	51.00			3.00 1.00	2.75 .75					31 31, 28	
A 16B	76	12.00	56E44 SHLD A16					.20 .20	NO NO			
A 16R			56E61 56J21-227					.20 .10	NO NO		 49	
A 16Y			56P1-39 56J21-226				2.00	.10 .10	NO NO		49 49	
A 18	4	38.00	56P1-91 56TB1-K1					.10 .20	NO NO		49	
A 19	77	39.00									32 32	
A 19R			56P1-11 56TB2-G4					.10 .20	NO NO		49	
A 19Y			56P1-10 56TB2-H4					.10 .20	NO NO		49	
A 20	4	39.00	56P1-78 56TB2-M4					.10 .20	NO NO		49	
A 21	4	48.00	56P1-7 56TB3-S21					.10 .20	NO NO		49	

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SCALE-NONE | REV LTR A | SHEET 12 OF 120

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 22	4	38.00	56P1-26 56TB1-U2					.10 .20	NO NO		49	
A 23	2	39.00			1.00 2.50	.75 2.25					31 31, 28	
A 23B	76	12.00	56TB2-S2 SHLD A23					.20 .20	NO NO			
A 23R			56P1-96 56TB2-N2					.10 .20	NO NO		49	
A 23Y			56P1-97 56TB2-R2					.10 .20	NO NO		49	
A 24	2	39.00			1.00 2.50	.75 2.25					31 31, 28	
A 24B	76	12.00	56TB2-F2 SHLD A24					.20 .20	NO NO			
A 24R			56P1-70 56TB2-H2					.10 .20	NO NO		49	
A 24Y			56P1-71 56TB2-G2					.10 .20	NO NO		49	
A 25	2	39.00			1.00 2.50	.75 2.25					31 31, 28	
A 25B	76	12.00	56TB2-F7 SHLD A25					.20 .20	NO NO			
A 25R			56P1-82 56TB2-H7					.10 .20	NO NO		49	

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LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 25Y			56P1-83 56TB2-G7					.10 .20	NO NO		49	
A 26	4	38.00	56P1-4 56TB1-D6					.10 .20	NO NO		49 64	
A 27	2	39.00			3.00 1.00	2.75 .75					31 31, 28	
A 27B	76	12.00	56E44 SHLD A27					.20 .20	NO NO			
A 27R			56E61 56J21-225					.20 .10	NO NO		 49	
A 27Y			56P1-76 56J21-224				2.00	.10 .10	NO NO		49 49	
A 28	4	48.00	56P1-88 56TB3-F3					.10 .20	NO NO		49	
A 29	4	48.00	56P1-89 56TB3-M21					.10 .20	NO NO		49 64	
A 30	4	39.00	56P1-37 56TB2-C2					.10 .20	NO NO		49	
A 31	4	48.00	56P1-45 56TB3-M2					.10 .20	NO NO		49 64	
A 32	4	48.00	56P1-55 56TB3-L2					.10 .20	NO NO		49 64	
A 33	4	48.00	56P1-84 56TB3-B20					.10 .20	NO NO		49	

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SCALE-NONE | REV LTR A | SHEET 14 OF 120

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 38	77	38.00									32 32	
A 38R	4		56J1-67 56TB2-H3					.10 .20	NO NO		49 64	
A 38Y	4		56J1-57 56TB2-G3					.10 .20	NO NO		49 64	
A 39	2	38.00			1.00 2.50	.75 2.25					31 31, 28	
A 39B	76	12.00	56TB2-F2 SHLD A39					.20 .20	NO NO			
A 39R			56J1-35 56TB2-H2					.10 .20	NO NO		49	
A 39Y			56J1-45 56TB2-G2					.10 .20	NO NO		49	
A 40	2	47.00			1.00 2.50	.75 2.25					31 31, 28	
A 40B	76	12.00	56TB3-H14 SHLD A40					.20 .20	NO NO			
A 40R			56J1-20 56TB3-F14					.10 .20	NO NO		49	
A 40Y			56J1-6 56TB3-F13					.10 .20	NO NO		49	
A 41	2	47.00			1.00 2.50	.75 2.25					31 31, 28	

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SIZE A 1023055

SCALE - NONE REV LTR / A SHEET 15 OF 120

MIL 2084 4-63

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 41B	76	12.00	56TB3-H13 SHLD A41					.20 .20	NO NO			
A 41R			56J1-21 56TB3-D13					.10 .20	NO NO		49	
A 41Y			56J1-7 56TB3-D14					.10 .20	NO NO		49	
A 42	2	38.00			1.00 2.50	.75 2.25					31 31, 28	
A 42B	76	12.00	56TB2-G1 SHLD A42					.20 .20	NO NO		65	
A 42R			56J1-104 56TB2-H1					.10 .20	NO NO		49 64	
A 42Y			56J1-90 56TB2-G1					.10 .20	NO NO		49	
A 43	2	38.00			1.00 2.50	.75 2.25					31 31, 28	
A 43B	76	12.00	56TB2-V6 SHLD A43					.20 .20	NO NO			
A 43R			56J1-100 56TB2-W6					.10 .20	NO NO		49	
A 43Y			56J1-86 56TB2-W7					.10 .20	NO NO		49 64	
A 44	2	38.00			1.00 2.50	.75 2.25					31 31, 28	

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LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 44B	76	12.00	56TB2-D8 SHLD A44					.20 .20	NO NO		65	
A 44R			56J1-101 56TB2-B8					.10 .20	NO NO		49	
A 44Y			56J1-87 56TB2-C8					.10 .20	NO NO		49 64	
A 45	3	38.00			1.00 2.50	.75 2.25					31 31, 28	
A 45B	76	12.00	56TB2-A5 SHLD A45					.20 .20	NO NO		65	
A 45G			56J1-108 56TB2-C5					.10 .20	NO NO		49 64	
A 45R			56J1-94 56TB2-A5					.10 .20	NO NO		49	
A 45Y			56J1-107 56TB2-B5					.10 .20	NO NO		49 64	
A 46	77	12.00									32 32	
A 46R			56J1-50 56E4					.10 .20	NO NO		49 27	
A 46Y			56J1-60 56E3					.10 .20	NO NO		49 27	
A 48	4	12.00	56J1-16 56E6					.10 .20	NO NO		49 27	

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MIL 2084 4-63

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 50	4	12.00	56J1-15 56E8					.10 .20	NO NO		49 27	
A 51	3	38.00			1.00 2.50	.75 2.25					31 31, 28	
A 51B	76	12.00	56TB2-T7 SHLD A51					.20 .20	NO NO		65	
A 51G			56J1-105 56TB2-T6					.10 .20	NO NO		49 64	
A 51R			56J1-106 56TB2-U6					.10 .20	NO NO		49 64	
A 51Y			56J1-92 56TB2-T7					.10 .20	NO NO		49	
A 52	78	38.00									32 32	
A 52G			56J1-31 56TB2-L5					.10 .20	NO NO		49 64	
A 52R			56J1-43 56TB2-K4					.10 .20	NO NO		49	
A 52Y			56J1-32 56TB2-L6					.10 .20	NO NO		49 64	
A 53	77	12.00									32 32	
A 53R			56J1-28 56E9					.10 .20	NO NO		49 28	

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	LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A	53Y			56J1-29 56E10					.10 .20	NO NO		49 28	
A	54	4	12.00	56J1-41 56E12					.10 .20	NO NO		49 28	
A	55	4	38.00	56J1-34 56TB2-W1					.10 .20	NO NO		49 64	
A	56	4	38.00	56J1-30 56TB2-N5					.10 .20	NO NO		49 64	
A	62	77	37.00									32 32	
A	62R			56J2-67 56TB2-H6					.10 .20	NO NO		49 64	
A	62Y			56J2-57 56TB2-G6					.10 .20	NO NO		49 64	
A	63	2	37.00			1.00 2.50	.75 2.25					31 31, 28	
A	63B	76	12.00	56TB2-F7 SHLD A63					.20 .20	NO NO			
A	63R			56J2-35 56TB2-H7					.10 .20	NO NO		49	
A	63Y			56J2-45 56TB2-G7					.10 .20	NO NO		49	
A	64	2	46.00			1.00 2.50	.75 2.25					31 31, 28	

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	LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A	64B	76	12.00	56E48 SHLD A64					.20 .20	NO NO		27	
A	64R			56J2-20 56TB3-N20					.10 .20	NO NO		49	
A	64Y			56J2-6 56TB3-N21					.10 .20	NO NO		49	
A	65	2	46.00			1.00 2.50	.75 2.25					31 31, 28	
A	65B	76	12.00	56TB3-H12 SHLD A65					.20 .20	NO NO			
A	65R			56J2-21 56TB3-C13					.10 .20	NO NO		49	
A	65Y			56J2-7 56TB3-C14					.10 .20	NO NO		49	
A	66	2	37.00			1.00 2.50	.75 2.25					31 31, 28	
A	66B	76	12.00	56TB2-G8 SHLD A66					.20 .20	NO NO		65	
A	66R			56J2-104 56TB2-H8					.10 .20	NO NO		49 64	
A	66Y			56J2-90 56TB2-G8					.10 .20	NO NO		49	
A	67	2	37.00			1.00 2.50	.75 2.25					31 31, 28	

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	LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A	67B	76	12.00	56TB2-V5 SHLD A67					.20 .20	NO NO			
A	67R			56J2-100 56TB2-U5					.10 .20	NO NO		49	
A	67Y			56J2-86 56TB2-U4					.10 .20	NO NO		49 64	
A	68	2	37.00			1.00 2.50	.75 2.25					31 31, 28	
A	68B	76	12.00	56TB2-D7 SHLD A68					.20 .20	NO NO			
A	68R			56J2-101 56TB2-B7					.10 .20	NO NO		49	
A	68Y			56J2-87 56TB2-C7					.10 .20	NO NO		49 64	
A	69	3	37.00			1.00 2.50	.75 2.25					31 31, 28	
A	69B	76	12.00	56TB2-C6 SHLD A69					.20 .20	NO NO		65	
A	69G			56J2-108 56TB2-A6					.10 .20	NO NO		49 64	
A	69R			56J2-94 56TB2-C6					.10 .20	NO NO		49	
A	69Y			56J2-107 56TB2-B6					.10 .20	NO NO		49 64	

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	LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A	70	77	12.00									32 32	
A	70R			56J2-50 56E4					.10 .20	NO NO		49	
A	70Y			56J2-60 56E3					.10 .20	NO NO		49	
A	72	4	12.00	56J2-16 56E6					.10 .20	NO NO		49	
A	74	4	12.00	56J2-15 56E8					.10 .20	NO NO		49	
A	75	3	37.00			1.00 2.50	.75 2.25					31 31, 28	
A	75B	76	12.00	56TB2-X6 SHLD A75					.20 .20	NO NO		65	
A	75G			56J2-105 56TB2-X5					.10 .20	NO NO		49 64	
A	75R			56J2-106 56TB2-W5					.10 .20	NO NO		49 64	
A	75Y			56J2-92 56TB2-X6					.10 .20	NO NO		49	
A	76	78	37.00									32 32	
A	76G			56J2-31 56TB2-L3					.10 .20	NO NO		49 64	

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	LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A	76R			56J2-43 56TB2-K4					.10 .20	NO NO		49	
A	76Y			56J2-32 56TB2-K3					.10 .20	NO NO		49 64	
A	77	77	12.00									32 32	
A	77R			56J2-28 56E9					.10 .20	NO NO		49	
A	77Y			56J2-29 56E10					.10 .20	NO NO		49	
A	78	4	12.00	56J2-41 56E12					.10 .20	NO NO		49	
A	79	4	37.00	56J2-34 56TB2-X1					.10 .20	NO NO		49 64	
A	80	4	37.00	56J2-30 56TB2-R5					.10 .20	NO NO		49 64	
A	84	77	12.00									32 32	
A	84R			56J3-1 56E1					.10 .20	NO NO		49	
A	84Y			56J3-14 56E2					.10 .20	NO NO		49	
A	85	77	38.00									32 32	

	LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A	85R			56J3-67 56TB2-N1					.10 .20	NO NO		49 64	
A	85Y			56J3-57 56TB2-R1					.10 .20	NO NO		49 64	
A	86	2	38.00			1.00 2.50	.75 2.25					31 31, 28	
A	86B	76	12.00	56TB2-S2 SHLD A86					.20 .20	NO NO			
A	86R			56J3-35 56TB2-N2					.10 .20	NO NO		49	
A	86Y			56J3-45 56TB2-R2					.10 .20	NO NO		49	
A	87	2	38.00			1.00 2.50	.75 2.25					31 31, 28	
A	87B	76	12.00	56TB2-M8 SHLD A87					.20 .20	NO NO			
A	87R			56J3-20 56TB2-R8					.10 .20	NO NO		49 64	
A	87Y			56J3-6 56TB2-N7					.10 .20	NO NO		49	
A	88	2	38.00			1.00 2.50	.75 2.25					31 31, 28	
A	88B	76	12.00	56TB2-V8 SHLD A88					.20 .20	NO NO			

	LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A	88R			56J3-21 56TB2-T8					.10 .20	NO NO		49 64	
A	88Y			56J3-7 56TB2-U8					.10 .20	NO NO		49	
A	89	2	38.00			1.00 2.50	.75 2.25					31 31, 28	
A	89B	76	12.00	56TB2-S3 SHLD A89					.20 .20	NO NO			
A	89R			56J3-104 56TB2-N3					.10 .20	NO NO		49	
A	89Y			56J3-90 56TB2-R3					.10 .20	NO NO		49	
A	90	2	38.00			1.00 2.50	.75 2.25					31 31, 28	
A	90B	76	12.00	56TB2-V4 SHLD A90					.20 .20	NO NO		65	
A	90R			56J3-100 56TB2-W4					.10 .20	NO NO		49	
A	90Y			56J3-86 56TB2-X4					.10 .20	NO NO		49 64	
A	91	2	38.00			1.00 2.50	.75 2.25					31 31, 28	
A	91B	76	12.00	56TB2-V2 SHLD A91					.20 .20	NO NO			

	LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A	91R			56J3-101 56TB2-W2					.10 .20	NO NO		49	
A	91Y			56J3-87 56TB2-X2					.10 .20	NO NO		49 64	
A	92	3	38.00			1.00 2.50	.75 2.25					31 31, 28	
A	92B	76	12.00	56TB2-A4 SHLD A92					.20 .20	NO NO		65	
A	92G			56J3-108 56TB2-C4					.10 .20	NO NO		49 64	
A	92R			56J3-94 56TB2-A4					.10 .20	NO NO		49	
A	92Y			56J3-107 56TB2-B4					.10 .20	NO NO		49 64	
A	93	77	12.00									32 32	
A	93R			56J3-50 56E4					.10 .20	NO NO		49	
A	93Y			56J3-60 56E3					.10 .20	NO NO		49	
A	96	3	38.00			1.00 2.50	.75 2.25					31 31, 28	
A	96B	76	12.00	56TB2-R7 SHLD A96					.20 .20	NO NO		65	

	LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A	96G			56J3-105 56TB2-R6					.10 .20	NO NO		49 64	
A	96R			56J3-106 56TB2-N6					.10 .20	NO NO		49 64	
A	96Y			56J3-92 56TB2-R7					.10 .20	NO NO		49	
A	97	78	38.00									32 32	
A	97G			56J3-31 56TB2-K6					.10 .20	NO NO		49 64	
A	97R			56J3-43 56TB2-K4					.10 .20	NO NO		49 66	
A	97Y			56J3-32 56TB2-K5					.10 .20	NO NO		49 64	
A	98	77	12.00									32 32	
A	98R			56J3-28 56E9					.10 .20	NO NO		49	
A	98Y	4	12.00	56J3-29 56E10					.10 .20	NO NO		49	
A	99	4	12.00	56J3-41 56E12					.10 .20	NO NO		49	
A	100	4	38.00	56J3-34 56TB2-S1					.10 .20	NO NO		49 64	

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	LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A	101	4	38.00	56J3-89 56TB2-T1					.10 .20	NO NO		49 64	
A	102	4	38.00	56J3-30 56TB2-K8					.10 .20	NO NO		49 64	
A	104	77	12.00									32 32	
A	104R	4	12.00	56J4-1 56E14					.10 .20	NO NO		49 28	
A	104Y	4	12.00	56J4-14 56E13					.10 .20	NO NO		49 28	
A	107	2	48.00			1.00 2.50	.75 2.25					31 31, 28	
A	107B	76	12.00	56TB3-H9 SHLD A107					.20 .20	NO NO			
A	107R			56J4-57 56TB3-K11					.10 .20	NO NO		49	
A	107Y			56J4-67 56TB3-K10					.10 .20	NO NO		49	
A	108	2	48.00			1.00 2.50	.75 2.25					31 31, 28	
A	108B	76	12.00	56TB3-N15 SHLD A108					.20 .20	NO NO		64	
A	108R			56J4-66 56TB3-N13					.10 .20	NO NO		49	

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	LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A	108Y			56J4-56 56TB3-N14					.10 .20	NO NO		49	
A	109	78	48.00									32 32	
A	109G			56J4-34 56TB3-T12					.10 .20	NO NO		49 64	
A	109R			56J4-45 56TB3-R12					.10 .20	NO NO		49 64	
A	109Y			56J4-35 56TB3-S12					.10 .20	NO NO		49 64	
A	110	2	48.00			1.00 2.50	.75 2.25					31 31, 28	
A	110B	76	12.00	56TB3-K9 SHLD A110					.20 .20	NO NO			
A	110R			56J4-6 56TB3-K7					.10 .20	NO NO		49 64	
A	110Y			56J4-20 56TB3-K8					.10 .20	NO NO		49 64	
A	111	2	48.00			1.00 2.50	.75 2.25					31 31, 28	
A	111B	76	12.00	56TB3-G15 SHLD A111					.20 .20	NO NO		64	
A	111R			56J4-7 56TB3-G13					.10 .20	NO NO		49 64	

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	LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A	111Y			56J4-21 56TB3-G14					.10 .20	NO NO		49 64	
A	112	2	48.00			1.00 2.50	.75 2.25					31 31, 28	
A	112B	76	12.00	56TB3-H9 SHLD A112					.20 .20	NO NO			
A	112R			56J4-104 56TB3-H10					.10 .20	NO NO		49 64	
A	112Y			56J4-90 56TB3-H11					.10 .20	NO NO		49 64	
A	113	4	48.00	56J4-89 56TB3-M18					.10 .20	NO NO		49 64	
A	114	2	48.00			1.00 2.50	.75 2.25					31 31, 28	
A	114B	76	12.00	56TB3-N9 SHLD A114					.20 .20	NO NO			
A	114R			56J4-100 56TB3-N7					.10 .20	NO NO		49 64	
A	114Y			56J4-86 56TB3-N8					.10 .20	NO NO		49 64	
A	115	2	48.00			1.00 2.50	.75 2.25					31 31, 28	
A	115B	76	12.00	56TB3-N9 SHLD A115					.20 .20	NO NO		65	

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	LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A	115R			56J4-101 56TB3-N11					.10 .20	NO NO		49 64	
A	115Y			56J4-87 56TB3-N10					.10 .20	NO NO		49 64	
A	116	3	48.00			1.00 2.50	.75 2.25					31 31, 28	
A	116B	76	12.00	56TB3-S5 SHLD A116					.20 .20	NO NO		65	
A	116G			56J4-108 56TB3-S4					.10 .20	NO NO		49 64	
A	116R			56J4-94 56TB3-S5					.10 .20	NO NO		49	
A	116Y			56J4-107 56TB3-S6					.10 .20	NO NO		49 64	
A	117	77	12.00									32 32	
A	117R			56J4-50 56E17					.10 .20	NO NO		49 27	
A	117Y			56J4-60 56E16					.10 .20	NO NO		49 27	
A	121	2	48.00			1.00 2.50	.75 2.25					31 31, 28	
A	121B	76	12.00	56TB3-L9 SHLD A121					.20 .20	NO NO			

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	LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A	121R			56J4-106 56TB3-L7					.10 .20	NO NO		49 64	
A	121Y			56J4-92 56TB3-L8					.10 .20	NO NO		49 64	
A	122	78	48.00									32 32	
A	122G			56J4-31 56TB3-D11					.10 .20	NO NO		49 64	
A	122R			56J4-43 56TB3-B17					.10 .18	NO NO		49 65	
A	122Y			56J4-32 56TB3-C11					.10 .20	NO NO		49 64	
A	123	77	12.00									32 32	
A	123R	4		56J4-28 56E9					.10 .20	NO NO		49	
A	123Y	4	12.00	56J4-29 56E10					.10 .20	NO NO		49	
A	124	4	12.00	56J4-41 56E12					.10 .20	NO NO		49	
A	130	2	50.00			1.00 2.50	.75 2.25					31 31, 28	
A	130B	76	12.00	56TB3-G9 SHLD A130					.20 .20	NO NO			

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	LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A	130R			56J5-8 56TB3-G10					.10 .20	NO NO		49	
A	130Y			56J5-22 56TB3-F10					.10 .20	NO NO		49	
A	131	2	50.00			1.00 2.50	.75 2.25					31 31, 28	
A	131B	76	12.00	56TB3-K15 SHLD A131					.20 .20	NO NO		66	
A	131R			56J5-9 56TB3-F16					.10 .20	NO NO		49	
A	131Y			56J5-10 56TB3-G16					.10 .20	NO NO		49	
A	132	2	50.00			3.00 2.50	2.75 2.25					31 31, 28	
A	132B	76	12.00	56TB3-L9 SHLD A132					.20 .20	NO NO		65	
A	132R			56J5-12 56TB3-L10				2.00	.10 .20	NO NO		49 64	
A	132Y			56E18 56TB3-L11					.20 .20	NO NO		27 64	
A	133	4	12.00	56J5-11 56E18					.10 .20	NO NO		49	
A	134	2	50.00			1.00 2.50	.75 2.25					31 31, 28	

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1023055
SCALE - NONE
REV LTR A
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	LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A	134B	76	12.00	56TB3-R15 SHLD A134					.20 .20	NO NO			
A	134R			56J5-68 56TB3-R14					.10 .20	NO NO		49 64	
A	134Y			56J5-67 56TB3-R13					.10 .20	NO NO		49 64	
A	135	2	50.00			1.00 2.50	.75 2.25					31 31, 28	
A	135B	76	12.00	56TB3-H9 SHLD A135					.20 .20	NO NO		66	
A	135R			56J5-104 56TB3-H8					.10 .20	NO NO		49 64	
A	135Y			56J5-90 56TB3-H7					.10 .20	NO NO		49 64	
A	136	4	50.00	56J5-89 56TB3-N18					.10 .20	NO NO		49 64	
A	137	2	50.00			1.00 2.50	.75 2.25					31 31, 28	
A	137B	76	12.00	56TB3-T9 SHLD A137					.20 .20	NO NO			
A	137R			56J5-100 56TB3-T11					.10 .20	NO NO		49 64	
A	137Y			56J5-86 56TB3-T10					.10 .20	NO NO		49 64	

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REV LTR A
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LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 138	2	50.00			1.00 2.50	.75 2.25					31 31, 28	
A 138B	76	12.00	56TB3-S9 SHLD A138					.20 .20	NO NO			
A 138R			56J5-101 56TB3-S11					.10 .20	NO NO		49 64	
A 138Y			56J5-87 56TB3-S10					.10 .20	NO NO		49 64	
A 139	3	50.00			1.00 2.50	.75 2.25					31 31, 28	
A 139B	76	12.00	56TB3-T5 SHLD A139					.20 .20	NO NO		65	
A 139G			56J5-108 56TB3-T6					.10 .20	NO NO		49 64	
A 139R			56J5-94 56TB3-T5					.10 .20	NO NO		49	
A 139Y			56J5-107 56TB3-T4					.10 .20	NO NO		49 64	
A 144	2	50.00			1.00 2.50	.75 2.25					31 31, 28	
A 144B	76	12.00	56TB3-M9 SHLD A144					.20 .20	NO NO			
A 144R			56J5-106 56TB3-M8					.10 .20	NO NO		49 64	

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SCALE-NONE
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LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 144Y			56J5-92 56TB3-M7					.10 .20	NO NO		49 64	
A 145	78	50.00									32 32	
A 145G			56J5-31 56TB3-D12					.10 .20	NO NO		49 64	
A 145R			56J5-43 56TB3-B16					.10 .18	NO NO		49 65	
A 145Y			56J5-32 56TB3-C12					.10 .20	NO NO		49 64	
A 146	77	12.00									32 32	
A 146R			56J5-28 56E9					.10 .20	NO NO		49	
A 146Y			56J5-29 56E10					.10 .20	NO NO		49	
A 147	4	12.00	56J5-41 56E12					.10 .20	NO NO		49	
A 148	77	50.00									32 32	
A 148R			56J5-56 56TB3-L12					.10 .20	NO NO		49 64	
A 148Y			56J5-66 56TB3-K12					.10 .20	NO NO		49 64	

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LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 149	4	12.00	56J5-25 56E18					.10 .20	NO NO		49	
A 150	77	80.00									32 32	
A 150R			56J6-1 56P1-1					.10 .10	NO NO		49 49	
A 150Y			56J6-2 56P1-2					.10 .10	NO NO		49 49	
A 151	77	80.00									32 32	
A 151R			56J6-14 56P1-14					.10 .10	NO NO		49 49	
A 151Y	4	80.00	56J6-15 56P1-15					.10 .10	NO NO		49 49	
A 152	77	80.00									32 32	
A 152R			56J6-29 56P1-29					.10 .10	NO NO		49 49	
A 152Y			56J6-28 56P1-28					.10 .10	NO NO		49 49	
A 153	77	51.00									32 32	
A 153R			56J6-108 56TB1-S1					.10 .20	NO NO		49	

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LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 153Y			56J6-107 56TB1-S2					.10 .20	NO NO		49	
A 154	4	51.00	56J6-12 56TB1-K7					.10 .20	NO NO		49	
A 155	2	56.00			3.00 2.50	2.75 2.25					31 31, 28	
A 155B	76	12.00	56TB2-D3 SHLD A155					.20 .20	NO NO		65	
A 155R			56E55 56TB2-F3					.20 .20	NO NO		27 65	
A 155Y			56J6-68 56TB2-D2				2.00	.10 .20	NO NO		49 65	
A 156	2	68.00			3.00 1.00	2.75 .75					31 31, 28	
A 156B	76	12.00	56E44 SHLD A156					.20 .20	NO NO			
A 156R			56E55 56J21-229					.20 .10	NO NO		49	
A 156Y			56J6-69 56J21-228				2.00	.10 .10	NO NO		49 49	
A 157	4	80.00	56J6-18 56P1-18					.10 .10	NO NO		49 49	
A 158	4	51.00	56J6-81 56TB1-F8					.10 .20	NO NO		49	

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LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 159	4	56.00	56J6-37 56TB2-C2					.10 .20	NO NO		49 65	
A 160	4	80.00	56J6-9 56P1-9					.10 .10	NO NO		49 49	
A 161	4	80.00	56J6-6 56P1-6					.10 .10	NO NO		49 49	
A 162	4	80.00	56J6-34 56P1-34					.10 .10	NO NO		49 49	
A 163	4	80.00	56J6-35 56P1-35					.10 .10	NO NO		49 49	
A 164	4	80.00	56J6-36 56P1-36					.10 .10	NO NO		49 49	
A 165	4	80.00	56J6-23 56P1-23					.10 .10	NO NO		49 49	
A 166	4	66.00	56J6-24 56TB3-F4					.10 .20	NO NO		49 65	
A 167	4	80.00	56J6-25 56P1-25					.10 .10	NO NO		49 49	
A 168	4	80.00	56J6-93 56P1-93					.10 .10	NO NO		49 49	
A 169	4	56.00	56J6-78 56TB2-L4					.10 .20	NO NO		49	
A 170	4	80.00	56J6-56 56P1-56					.10 .10	NO NO		49 49	

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SERIES 0 SPARE 1023055

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 171	4	80.00	56J6-104 56P1-104					.10 .10	NO NO		49 49	
A 172	4	80.00	56J6-92 56P1-92					.10 .10	NO NO		49 49	
A 173	4	80.00	56J6-105 56P1-105					.10 .10	NO NO		49 49	
A 174	4	80.00	56J6-94 56P1-94					.10 .10	NO NO		49 49	
A 175	4	80.00	56J6-22 56P1-22					.10 .10	NO NO		49 49	
A 176	4	80.00	56J6-79 56P1-79					.10 .10	NO NO		49 49	
A 177	4	80.00	56J6-46 56P1-46					.10 .10	NO NO		49 49	
A 178	4	66.00	56J6-91 56TB3-B21					.10 .20	NO NO		49	
A 179	4	50.00	56J8-67 56TB1-G1					.10 .20	NO NO		49	
A 181	4	65.00	56J8-66 56TB3-H6					.10 .20	NO NO		49	
A 182	77	65.00									32 32	
A 182R			56J8-68 56TB3-B13					.10 .20	NO NO		49	

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LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 182Y			56J8-81 56TB3-B12					.10 .20	NO NO		49	
A 183	4	55.00	56J8-106 56TB2-S6					.10 .20	NO NO		49	
A 184	4	55.00	56J8-78 56TB2-S7					.10 .20	NO NO		49	
A 185	4	55.00	56J8-93 56TB2-S4					.10 .20	NO NO		49	
A 186	4	55.00	56J8-79 56TB2-S5					.10 .20	NO NO		49	
A 187	4	50.00	56J8-51 56TB1-H8					.10 .20	NO NO		49	
A 188	4	65.00	56J8-60 56TB3-M6					.10 .20	NO NO		49	
A 189	4	12.00	56J8-61 56E20					.10 .20	NO NO		49 28	
A 190	4	65.00	56J8-73 56TB3-B5					.10 .20	NO NO		49	
A 191	4	12.00	56J8-84 56E20					.10 .20	NO NO		49	
A 192	4	65.00	56J8-62 56TB3-D3					.10 .20	NO NO		49	
A 193	4	50.00	56J8-42 56TB1-U2					.10 .20	NO NO		49	

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SERIES 0 SPARE 1023055

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 194	4	12.00	56J8-31 56E19					.10 .20	NO NO		49 28	
A 195	4	12.00	56J8-70 56E19					.10 .20	NO NO		49	
A 196	4	68.00	56J8-53 56J22-38					.10 .10	NO NO		49 49	
A 197	4	68.00	56J8-54 56J22-37					.10 .10	NO NO		49 49	
A 198	4	50.00	56J8-71 56TB1-H6					.10 .20	NO NO		49	
A 199	4	65.00	56J8-95 56TB3-B14					.10 .20	NO NO		49	
A 200	4	65.00	56J8-72 56TB3-B3					.10 .20	NO NO		49	
A 201	4	12.00	56J8-83 56E20					.10 .20	NO NO		49	
A 202	4	55.00	56J8-18 56TB2-S8					.10 .20	NO NO		49	
A 203	4	65.00	56J8-41 56TB3-B4					.10 .20	NO NO		49	
A 204	4	12.00	56J8-30 56E19					.10 .20	NO NO		49	
A 205	4	12.00	56J8-28 56E19					.10 .20	NO NO		49	

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LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 206	4	68.00	56J8-43 56J22-72					.10 .10	NO NO		49 49	
A 207	4	68.00	56J8-32 56J22-71					.10 .10	NO NO		49 49	
A 208	4	12.00	56J8-17 56E19					.10 .20	NO NO		49	
A 211	4	50.00	56J8-92 56TB1-S5					.10 .20	NO NO		49	
A 212	4	12.00	56J8-52 56E19					.10 .20	NO NO		49	
A 213	4	12.00	56J8-63 56E20					.10 .20	NO NO		49	
A 214	4	55.00	56J8-82 56TB2-D6					.10 .20	NO NO		49	
A 215	4	65.00	56J8-29 56TB3-B21					.10 .20	NO NO		49 65	
A 216	77	37.00									32 32	
A 216R			56P2-A 56TB2-G4					.20 .20	NO NO		54	
A 216Y			56P2-B 56TB2-G5					.20 .20	NO NO		54 64	
A 217	2	37.00			1.50 2.50	1.25 2.25					31 31, 28	

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LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 217B	76	12.00	56TB2-V3 SHLD A217					.20 .20	NO NO		64	
A 217R			56P2-C 56TB2-W4					.20 .20	NO NO		54 65	
A 217Y			56P2-D 56TB2-W3					.20 .20	NO NO		54 64	
A 218	2	33.00			1.50 2.50	1.25 2.25					31 31, 28	
A 218B	76	12.00	56TB2-V2 SHLD A218					.20 .20	NO NO		65	
A 218R			56P2-E 56TB2-X3					.20 .20	NO NO		54 64	
A 218Y			56P2-F 56TB2-W2					.20 .20	NO NO		54 65	
A 219	2	33.00			1.50 2.50	1.25 2.25					31 31, 28	
A 219B	76	12.00	56TB2-V5 SHLD A219					.20 .20	NO NO		65	
A 219R			56P2-G 56TB2-U5					.20 .20	NO NO		54 65	
A 219Y			56P2-H 56TB2-T5					.20 .20	NO NO		54 64	
A 220	2	33.00			1.50 2.50	1.25 2.25					31 31, 28	

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LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 220B	76	12.00	56TB2-D7 SHLD A220					.20 .20	NO NO		65	
A 220R			56P2-J 56TB2-A7					.20 .20	NO NO		54 64	
A 220Y			56P2-K 56TB2-B7					.20 .20	NO NO		54 65	
A 221	2	33.00			1.50 2.50	1.25 2.25					31 31, 28	
A 221B	76	12.00	56E48 SHLD A221					.20 .20	NO NO			
A 221R			56P2-L 56TB3-N20					.20 .20	NO NO		54	
A 221Y			56P2-M 56TB3-N21					.20 .20	NO NO		54	
A 222	2	33.00			1.50 2.50	1.25 2.25					31 31, 28	
A 222B	76	12.00	56TB3-H12 SHLD A222					.20 .20	NO NO			
A 222R			56P2-P 56TB3-C14					.20 .20	NO NO		54	
A 222Y			56P2-N 56TB3-C13					.20 .20	NO NO		54	
A 223	77	33.00									32 32	

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LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 223R			56P2-R 56TB1-D2					.20 .20	NO NO		54 64	
A 223Y			56P2-S 56TB1-C2					.20 .20	NO NO		54 64	
A 224	2	33.00			1.50 2.50	1.25 2.25					31 31, 28	
A 224B	76	12.00	56TB1-D7 SHLD A224					.20 .20	NO NO			
A 224R			56P2-T 56TB1-C6					.20 .20	NO NO		54	
A 224Y			56P2-U 56TB1-B6					.20 .20	NO NO		54	
A 225	2	37.00			1.50 2.50	1.25 2.25					31 31, 28	
A 225B	76	12.00	56TB2-V6 SHLD A225					.20 .20	NO NO		65	
A 225R			56P2-W 56TB2-W6					.20 .20	NO NO		54 65	
A 225Y			56P2-X 56TB2-X7					.20 .20	NO NO		54 64	
A 226	2	37.00			1.50 2.50	1.25 2.25					31 31, 28	
A 226B	76	12.00	56TB2-D8 SHLD A226					.20 .20	NO NO			

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LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 226R			56P2-Y 56TB2-A8					.20 .20	NO NO		54 64	
A 226Y			56P2-Z 56TB2-B8					.20 .20	NO NO		54 65	
A 227	2	45.00			1.50 2.50	1.25 2.25					31 31, 28	
A 227B	76	12.00	56TB3-H14 SHLD A227					.20 .20	NO NO			
A 227R			56P2-A* 56TB3-F14					.20 .20	NO NO		54	
A 227Y			56P2-B* 56TB3-F13					.20 .20	NO NO		54	
A 228	2	45.00			1.50 2.50	1.25 2.25					31 31, 28	
A 228B	76	12.00	56TB3-H13 SHLD A228					.20 .20	NO NO			
A 228R			56P2-F* 56TB3-D13					.20 .20	NO NO		54	
A 228Y			56P2-G* 56TB3-D14					.20 .20	NO NO		54	
A 229	1	38.00			1.50 2.50	1.25 2.25					32 32, 27	
A 229B	76	12.00	56TB1-D7 SHLD A229					.20 .20	NO NO		66	

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LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 229Y			56P3-A 56TB1-C7					.20 .20	NO NO		54	
A 230	1	38.00			1.50 2.50	1.25 2.25					32 32, 27	
A 230B	76	12.00	56TB1-D8 SHLD A230					.20 .20	NO NO		64	
A 230Y			56P3-B 56TB1-C8					.20 .20	NO NO		54	
A 231	79	38.00									31 31	
A 231G			56P3-U 56TB1-B8					.20 .20	NO NO		54	
A 231N			56P3-W 56TB1-A7					.20 .20	NO NO		54	
A 231R			56P3-C 56TB1-A8					.20 .20	NO NO		54	
A 231Y			56P3-V 56TB1-B7					.20 .20	NO NO		54	
A 232	2	42.00			1.50 2.50	1.25 2.25					31 31, 28	
A 232B	76	12.00	56TB2-M8 SHLD A232					.20 .20	NO NO			
A 232R			56P3-D 56TB2-N8					.20 .20	NO NO		54	

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LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 232Y			56P3-E 56TB2-N7					.20 .20	NO NO		54	
A 233	2	42.00			1.50 2.50	1.25 2.25					31 31, 28	
A 233B	76	12.00	56TB2-V8 SHLD A233					.20 .20	NO NO			
A 233R			56P3-F 56TB2-U8					.20 .20	NO NO		54	
A 233Y			56P3-G 56TB2-U7					.20 .20	NO NO		54	
A 234	2	38.00			1.50 2.50	1.25 2.25					31 31, 28	
A 234B	76	12.00	56TB1-B5 SHLD A234					.20 .20	NO NO		65	
A 234R			56P3-J 56TB1-B5					.20 .20	NO NO		54	
A 234Y			56P3-H 56TB1-C5					.20 .20	NO NO		54 64	
A 235	2	38.00			1.50 2.50	1.25 2.25					31 31, 28	
A 235B	76	12.00	56TB1-A6 SHLD A235					.20 .20	NO NO		65	
A 235R			56P3-K 56TB1-A6					.20 .20	NO NO		54	

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LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 235Y			56P3-L 56TB1-A5					.20 .20	NO NO		54 64	
A 236	2	50.00			1.50 2.50	1.25 2.25					31 31, 28	
A 236B	76	12.00	56TB3-S3 SHLD A236					.20 .20	NO NO		65	
A 236R			56P3-N 56TB3-R4					.20 .20	NO NO		54 64	
A 236Y			56P3-M 56TB3-R5					.20 .20	NO NO		54 64	
A 237	2	50.00			1.50 2.50	1.25 2.25					31 31, 28	
A 237B	76	12.00	56TB3-T3 SHLD A237					.20 .20	NO NO			
A 237R			56P3-R 56TB3-M14					.20 .20	NO NO		54 64	
A 237Y			56P3-P 56TB3-M13					.20 .20	NO NO		54 64	
A 238	77	38.00									32 32	
A 238R			56P3-X 56TB1-B2					.20 .20	NO NO		54	
A 238Y			56P3-Y 56TB1-A2					.20 .20	NO NO		54	

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LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 239	77	38.00									32 32	
A 239R			56P3-Z 56TB1-A4					.20 .20	NO NO		54	
A 239Y			56P3-A* 56TB1-A3					.20 .20	NO NO		54	
A 240	77	38.00									32 32	
A 240R			56P3-B* 56TB1-A3					.20 .20	NO NO		54	
A 240Y			56P3-C* 56TB1-A4					.20 .20	NO NO		54	
A 241	77	38.00									32 32	
A 241R			56P3-D* 56TB1-D3					.20 .20	NO NO		54	
A 241Y			56P3-E* 56TB1-D4					.20 .20	NO NO		54	
A 242	77	38.00									32 32	
A 242R			56P3-F* 56TB1-D4					.20 .20	NO NO		54	
A 242Y			56P3-G* 56TB1-D3					.20 .20	NO NO		54	

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LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 243	4	50.00	56P3-J* 56TB3-F5					.20 .20	NO NO		54	
A 244	4	50.00	56P3-H* 56TB3-T20					.20 .20	NO NO		54	
A 246	78	55.00									32 32	
A 246G			56P5-J* 56TB3-D16					.20 .20	NO NO		52 64	
A 246R			56P5-P 56TB3-C18					.20 .20	NO NO		52	
A 246Y			56P5-I* 56TB3-D17					.20 .20	NO NO		52 64	
A 247	77	12.00									32 32	
A 247R			56P5-K 56P5-CC					.20 .20	NO NO		52 52	
A 247Y			56P5-J 56P5-DD					.20 .20	NO NO		52 52	
A 248	2	56.00			1.50 2.50	1.25 2.25					31 31, 28	
A 248B	76	12.00	56TB3-R9 SHLD A248					.20 .20	NO NO			
A 248R			56P5-P* 56TB3-R8					.20 .18	NO NO		52 64	

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LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 248Y			56P5-N* 56TB3-R7					.20 .18	NO NO		52 64	
A 249	4	55.00	56P5-S 56TB3-K21					.20 .20	NO NO		52	
A 250	4	55.00	56P5-T 56TB3-K21					.20 .20	NO NO		52 65	
A 251	77	18.00									32 32	
A 251R			56P5-EE 56P4-D1					.20 .12	NO NO		52 69	
A 251Y			56P5-FF 56P4-D2					.20 .12	NO NO		52 69	
A 252	2	56.00			1.50 2.50	1.25 2.25					31 31, 28	
A 252B	76	12.00	56TB3-T9 SHLD A252					.20 .20	NO NO		65	
A 252R			56P5-Z 56TB3-T8					.20 .18	NO NO		52 64	
A 252Y			56P5-Y 56TB3-T7					.20 .18	NO NO		52 64	
A 253	2	56.00			1.50 2.50	1.25 2.25					31 31, 28	
A 253B	76	12.00	56TB3-S9 SHLD A253					.20 .20	NO NO		65	

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LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 253R			56P5-A* 56TB3-S8					.20 .20	NO NO		52 64	
A 253Y			56P5-B* 56TB3-S7					.20 .20	NO NO		52 64	
A 254	2	56.00			1.50 2.50	1.25 2.25					31 31, 28	
A 254B	76	12.00	56TB3-M15 SHLD A254					.20 .20	NO NO			
A 254R			56P5-C* 56TB3-M16					.20 .20	NO NO		52 64	
A 254Y			56P5-D* 56TB3-M17					.20 .20	NO NO		52 64	
A 255	2	56.00			1.50 2.50	1.25 2.25					31 31, 28	
A 255B	76	12.00	56TB3-H15 SHLD A255					.20 .20	NO NO			
A 255R			56P5-F* 56TB3-G16					.20 .18	NO NO		52 65	
A 255Y			56P5-E* 56TB3-F16					.20 .18	NO NO		52 65	
A 256	2	56.00			1.50 2.50	1.25 2.25					31 31, 28	
A 256B	76	12.00	56TB3-G9 SHLD A256					.20 .20	NO NO		65	

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LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 256R			56P5-G* 56TB3-G10					.20 .20	NO NO		52 65	
A 256Y			56P5-H* 56TB3-F10					.20 .20	NO NO		52 65	
A 257	2	56.00			1.50 2.50	1.25 2.25					31 31, 28	
A 257B	76	12.00	56TB3-S15 SHLD A257					.20 .20	NO NO			
A 257R			56P5-K* 56TB3-T16					.20 .20	NO NO		52 64	
A 257Y			56P5-M* 56TB3-T17					.20 .20	NO NO		52 64	
A 258	2	56.00			1.50 2.50	1.25 2.25					31 31, 28	
A 258B	76	12.00	56TB3-R9 SHLD A258					.20 .20	NO NO		65	
A 258R			56P5-Q* 56TB3-R10					.20 .20	NO NO		52 64	
A 258Y			56P5-R* 56TB3-R11					.20 .20	NO NO		52 64	
A 259	78	55.00									32 32	
A 259G			56P5-C 56TB3-F18					.20 .20	NO NO		52 64	

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LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 259R			56P5-B 56TB3-C18					.20 .20	NO NO		52 65	
A 259Y			56P5-A 56TB3-D18					.20 .20	NO NO		52 64	
A 260	2	56.00			1.50 2.50	1.25 2.25					31 31, 28	
A 260B	76	12.00	56TB3-S15 SHLD A260					.20 .20	NO NO			
A 260R			56P5-U* 56TB3-S17					.20 .20	NO NO		52 64	
A 260Y			56P5-V* 56TB3-S16					.20 .20	NO NO		52 64	
A 261	2	56.00			1.50 2.50	1.25 2.25					31 31, 28	
A 261B	76	12.00	56TB3-R15 SHLD A261					.20 .20	NO NO			
A 261R			56P5-W* 56TB3-N13					.20 .20	NO NO		52	
A 261Y			56P5-X* 56TB3-N14					.20 .20	NO NO		52	
A 262	2	56.00			1.50 2.50	1.25 2.25					31 31, 28	
A 262B	76	12.00	56TB3-K9 SHLD A262					.20 .20	NO NO			

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LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 262R			56P5-Y* 56TB3-K10					.20 .20	NO NO		52	
A 262Y			56P5-Z* 56TB3-K11					.20 .20	NO NO		52	
A 263	2	56.00			1.50 2.50	1.25 2.25					31 31, 28	
A 263B	76	12.00	56TB3-H15 SHLD A263					.20 .20	NO NO			
A 263R			56P5-HH 56TB3-H16					.20 .20	NO NO		52 64	
A 263Y			56P5-BB 56TB3-H17					.20 .20	NO NO		52 64	
A 264	4	55.00	56P5-AA 56TB3-S18					.20 .20	NO NO		52 64	
A 265	77	47.00									32 32	
A 265R			56P5-CC 56TB2-K2					.20 .20	NO NO		52	
A 265Y			56P5-DD 56TB2-L2					.20 .20	NO NO		52	
A 266	77	43.00									32 32	
A 266R			56P5-L 56TB1-T1					.20 .20	NO NO		52	

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LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 266Y			56P5-M 56TB1-T2					.20 .20	NO NO		52	
A 267	77	18.00									32 32	
A 267R			56P5-X 56P4-F2					.20 .12	NO NO		52 69	
A 267Y			56P5-W 56P4-F1					.20 .12	NO NO		52 69	
A 268	77	18.00									32 32	
A 268R			56P5-J 56P4-E2					.20 .12	NO NO		52 69	
A 268Y			56P5-K 56P4-E1					.20 .12	NO NO		52 69	
A 270	4	55.00	56P5-R 56TB3-F21					.20 .20	NO NO		52	
A 271	78	48.00									32 32	
A 271G			56P6-C 56TB1-G2					.20 .20	NO NO		54	
A 271R			56P6-A 56TB1-H3					.20 .20	NO NO		54	
A 271Y			56P6-B 56TB1-H2					.20 .20	NO NO		54	

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LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIPCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 272	4	48.00	56P6-F 56TB1-D5					.20 .20	NO NO		54 64	
A 273	77	48.00									32 32	
A 273R			56P6-H 56TB1-A2					.20 .20	NO NO		54	
A 273Y			56P6-J 56TB1-B2					.20 .20	NO NO		54	
A 274	4	36.00	56P6-K 56TB3-G5					.20 .20	NO NO		54 64	
A 275	77	36.00									32 32	
A 275R			56P6-M 56TB3-L4					.20 .20	NO NO		54 64	
A 275Y			56P6-L 56TB3-L3					.20 .20	NO NO		54 64	
A 276	4	36.00	56P6-N 56TB3-R6					.20 .20	NO NO		54	
A 277	4	36.00	56P6-Y 56TB3-N6					.20 .20	NO NO		54	
A 278	2	36.00			1.50 2.50	1.25 2.25					31 31, 28	
A 278B	76	12.00	56TB3-R3 SHLD A278					.20 .20	NO NO			

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LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 278R			56P6-V 56TB3-N5					.20 .20	NO NO		54 64	
A 278Y			56P6-W 56TB3-N4					.20 .20	NO NO		54 64	
A 279	2	36.00			1.50 2.50	1.25 2.25					31 31, 28	
A 279B	76	12.00	56TB3-N3 SHLD A279					.20 .20	NO NO		66	
A 279R			56P6-X 56TB3-N1					.20 .20	NO NO		54 64	
A 279Y			56P6-R 56TB3-N2					.20 .20	NO NO		54 64	
A 280	4	36.00	56P6-Z 56TB3-H4					.20 .20	NO NO		54 64	
A 281	77	36.00									32 32	
A 281R			56P6-F* 56TB3-C2					.20 .20	NO NO		54 64	
A 281Y			56P6-G* 56TB3-C3					.20 .20	NO NO		54	
A 282	77	36.00									32 32	
A 282R			56P6-B* 56TB3-L13					.20 .20	NO NO		54 64	

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LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 282Y			56P6-C* 56TB3-K13					.20 .20	NO NO		54 64	
A 283	77	36.00									32 32	
A 283R			56P6-D* 56TB3-K19					.20 .20	NO NO		54	
A 283Y			56P6-E* 56TB3-H19					.20 .20	NO NO		54	
A 284	4	36.00	56P6-D 56TB3-T20					.20 .20	NO NO		54 65	
A 285	4	36.00	56P6-P 56TB3-M1					.20 .20	NO NO		54 64	
A 286	4	36.00	56P6-A* 56TB3-K3					.20 .20	NO NO		54 64	
A 287	4	44.00	56P6-E 56TB2-D4					.20 .20	NO NO		54	
A 288	4	36.00	56P6-G 56TB3-F21					.20 .20	NO NO		54	
A 289	6	53.00			2.00 2.50	1.75 2.25					31 31, 28	
A 289B	76	12.00	56TB1-S8 SHLD A289					.20 .20	NO NO		64	
A 289L			56P7-C 56TB1-U8					.40 .20	NO NO		54 64	

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LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 289R			56P7-A 56TB1-T8					.40 .20	NO NO		54 64	
A 289W			56P7-B 56TB1-U7					.40 .20	NO NO		54 64	
A 290	6	53.00			2.00 2.50	1.75 2.25					31 31, 28	
A 290B	76	12.00	56TB1-N8 SHLD A290					.20 .20	NO NO		66	
A 290L			56P7-F 56TB1-L7					.40 .20	NO NO		54 64	
A 290R			56P7-D 56TB1-M8					.40 .20	NO NO		54 64	
A 290W			56P7-E 56TB1-L8					.40 .20	NO NO		54 64	
A 291	6	53.00			2.00 2.50	1.75 2.25					31 31, 28	
A 291B	76	12.00	56TB1-S6 SHLD A291					.20 .20	NO NO		65	
A 291L			56P7-J 56TB1-U6					.40 .20	NO NO		54 64	
A 291R			56P7-G 56TB1-T6					.40 .20	NO NO		54 64	
A 291W			56P7-H 56TB1-U5					.40 .20	NO NO		54 64	

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LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 292	6	53.00			2.00 2.50	1.75 2.25					31 31, 28	
A 292B	76	12.00	56TB1-S3 SHLD A292					.20 .20	NO NO		66	
A 292L			56P7-M 56TB1-U3					.40 .20	NO NO		54 64	
A 292R			56P7-K 56TB1-U4					.40 .20	NO NO		54 64	
A 292W			56P7-L 56TB1-T3					.40 .20	NO NO		54 64	
A 293	6	53.00			2.00 2.50	1.75 2.25					31 31, 28	
A 293B	76	12.00	56TB1-N4 SHLD A293					.20 .20	NO NO			
A 293L			56P7-R 56TB1-M4					.40 .20	NO NO		54 64	
A 293R			56P7-N 56TB1-L4					.40 .20	NO NO		54 64	
A 293W			56P7-P 56TB1-L3					.40 .20	NO NO		54 64	
A 294	6	53.00			2.00 2.50	1.75 2.25					31 31, 28	
A 294B	76	12.00	56TB1-N5 SHLD A294					.20 .20	NO NO		28	

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LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 294L			56P7-W 56TB1-L5					.40 .20	NO NO		54 64	
A 294R			56P7-U 56TB1-M5					.40 .20	NO NO		54 64	
A 294W			56P7-V 56TB1-L6					.40 .20	NO NO		54 64	
A 295	77	53.00									32 32	
A 295R			56P7-X 56TB1-M7					.20 .20	NO NO		54 64	
A 295Y			56P7-Y 56TB1-M6					.20 .20	NO NO		54 64	
A 296	77	53.00									32 32	
A 296R			56P7-Z 56TB1-M3					.20 .20	NO NO		54 64	
A 296Y			56P7-A* 56TB1-N2					.20 .20	NO NO		54 64	
A 297	77	53.00									32 32	
A 297R			56P7-B* 56TB1-T5					.20 .20	NO NO		54 64	
A 297Y			56P7-C* 56TB1-T4					.20 .20	NO NO		54 64	

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LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 298	79	53.00									31 31	
A 298G			56P7-G* 56TB1-B4					.20 .20	NO NO		54 64	
A 298N			56P7-H* 56TB1-C4					.20 .20	NO NO		54 64	
A 298R			56P7-F* 56TB1-C3					.20 .20	NO NO		54 64	
A 298Y			56P7-J* 56TB1-B3					.20 .20	NO NO		54 64	
A 299	77	55.00									32 32	
A 299R			56P8-A 56TB2-U3					.20 .20	NO NO		52	
A 299Y			56P8-B 56TB2-T2					.20 .20	NO NO		52	
A 300	78	46.00									32 32	
A 300G			56P8-G 56TB3-C16					.20 .20	NO NO		52	
A 300R			56P8-F 56TB3-C19					.20 .20	NO NO		52	
A 300Y			56P8-E 56TB3-C17					.20 .20	NO NO		52	

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LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 301	77	55.00									32 32	
A 301R			56P8-J 56TB2-K2					.20 .20	NO NO		52 65	
A 301Y			56P8-K 56TB2-L2					.20 .20	NO NO		52 65	
A 302	2	46.00			1.50 2.50	1.25 2.25					31 31, 28	
A 302B	76	12.00	56TB3-S15 SHLD A302					.20 .20	NO NO		66	
A 302R			56P8-N 56TB3-R17					.20 .20	NO NO		52 64	
A 302Y			56P8-P 56TB3-R16					.20 .20	NO NO		52 64	
A 303	4	46.00	56P8-R 56TB3-K15					.20 .20	NO NO		52	
A 304	2	46.00			1.50 2.50	1.25 2.25					31 31, 28	
A 304B	76	12.00	56TB3-H15 SHLD A304					.20 .20	NO NO		66	
A 304R			56P8-T 56TB3-K17					.20 .20	NO NO		52 64	
A 304Y			56P8-S 56TB3-K16					.20 .20	NO NO		52 64	

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LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 305	4	46.00	56P8-U 56TB3-R18					.20 .20	NO NO		52 64	
A 306	2	46.00			1.50 2.50	1.25 2.25					31 31, 28	
A 306B	76	12.00	56TB3-T15 SHLD A306					.20 .20	NO NO			
A 306R			56P8-V 56TB3-S13					.20 .20	NO NO		52 64	
A 306Y			56P8-W 56TB3-S14					.20 .20	NO NO		52 64	
A 307	2	46.00			1.50 2.50	1.25 2.25					31 31, 28	
A 307B	76	12.00	56TB3-T15 SHLD A307					.20 .20	NO NO		66	
A 307R			56P8-X 56TB3-T14					.20 .20	NO NO		52 64	
A 307Y			56P8-Y 56TB3-T13					.20 .20	NO NO		52 64	
A 308	78	46.00									32 32	
A 308G			56P8-D* 56TB3-F17					.20 .20	NO NO		52	
A 308R			56P8-H 56TB3-C19					.20 .20	NO NO		52 65	

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LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 308Y			56P8-C* 56TB3-G17					.20 .20	NO NO		52	
A 309	2	46.00			1.50 2.50	1.25 2.25					31 31, 28	
A 309B	76	12.00	56TB3-M15 SHLD A309					.20 .20	NO NO			
A 309R			56P8-E* 56TB3-N16					.20 .20	NO NO		52 64	
A 309Y			56P8-F* 56TB3-N17					.20 .20	NO NO		52 64	
A 310	2	46.00			1.50 2.50	1.25 2.25					31 31, 28	
A 310B	76	12.00	56TB3-M15 SHLD A310					.20 .20	NO NO		66	
A 310R			56P8-G* 56TB3-L16					.20 .20	NO NO		52 64	
A 310Y			56P8-I* 56TB3-L17					.20 .20	NO NO		52 64	
A 311	4	46.00	56P8-H* 56TB3-T18					.20 .20	NO NO		52 64	
A 312	2	46.00			1.50 2.50	1.25 2.25					31 31, 28	
A 312B	76	12.00	56TB3-K9 SHLD A312					.20 .20	NO NO		66	

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LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 312R			56P8-K* 56TB3-K11					.20 .20	NO NO		52 66	
A 312Y			56P8-J* 56TB3-K10					.20 .20	NO NO		52 66	
A 313	2	46.00			1.50 2.50	1.25 2.25					31 31, 28	
A 313B	76	12.00	56TB3-R15 SHLD A313					.20 .20	NO NO		66	
A 313R			56P8-N* 56TB3-N14					.20 .20	NO NO		52 66	
A 313Y			56P8-M* 56TB3-N13					.20 .20	NO NO		52 66	
A 314	77	59.00									32 32	
A 314R			56P8-R* 56TB1-T1					.20 .20	NO NO		52	
A 314Y			56P8-S* 56TB1-T2					.20 .20	NO NO		52	
A 315	4	46.00	56P8-B* 56TB3-K15					.20 .20	NO NO		52	
A 316	4	46.00	56P8-T* 56TB3-F22					.20 .20	NO NO		52	
A 317	77	42.00									32 32	

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LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 317R			56P9-5 56TB3-T19					.10 .20	NO NO		49 64	
A 317Y			56P9-6 56TB3-S19					.10 .20	NO NO		49 64	
A 318	77	42.00									32 32	
A 318R			56P9-9 56TB3-B18					.10 .20	NO NO		49 64	
A 318Y			56P9-8 56TB3-B19					.10 .20	NO NO		49 64	
A 319	78	54.00									32 32	
A 319G			56P9-78 56TB1-H2					.10 .20	NO NO		49 65	
A 319R			56P9-67 56TB1-G2					.10 .20	NO NO		49 65	
A 319Y			56P9-79 56TB1-H3					.10 .20	NO NO		49 65	
A 320	77	42.00									32 32	
A 320R			56P9-22 56TB3-D2					.10 .20	NO NO		49	
A 320Y			56P9-34 56TB3-C3					.10 .20	NO NO		49	

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LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 321	77	42.00									32 32	
A 321R			56P9-45 56TB2-K1					.10 .20	NO NO		49	
A 321Y			56P9-55 56TB2-L1					.10 .20	NO NO		49	
A 322	77	50.00									32 32	
A 322R			56P9-56 56TB2-U3					.10 .20	NO NO		49	
A 322Y			56P9-57 56TB2-T3					.10 .20	NO NO		49	
A 323	77	54.00									32 32	
A 323R			56P9-59 56TB1-C6					.10 .20	NO NO		49 65	
A 323Y			56P9-58 56TB1-B6					.10 .20	NO NO		49 65	
A 324	77	54.00									32 32	
A 324R			56P9-69 56TB1-H4					.10 .20	NO NO		49	
A 324Y			56P9-81 56TB1-G4					.10 .20	NO NO		49	

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LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 325	77	54.00									32 32	
A 325R			56P9-68 56TB1-H7					.10 .20	NO NO		49	
A 325Y			56P9-80 56TB1-G7					.10 .20	NO NO		49	
A 326	4	42.00	56P9-20 56TB3-N22					.10 .20	NO NO		49 64	
A 327	4	42.00	56P9-19 56TB3-T21					.10 .20	NO NO		49 64	
A 328	4	42.00	56P9-65 56TB3-H20					.10 .20	NO NO		49 64	
A 329	4	42.00	56P9-66 56TB3-L21					.10 .20	NO NO		49	
A 330	4	42.00	56P9-4 56TB3-R20					.10 .20	NO NO		49 64	
A 331	4	42.00	56P9-18 56TB3-N19					.10 .20	NO NO		49	
A 332	4	54.00	56P9-13 56TB1-H6					.10 .20	NO NO		49 65	
A 333	4	42.00	56P9-49 56TB3-B5					.10 .20	NO NO		49	
A 334	4	42.00	56P9-48 56TB3-M6					.10 .20	NO NO		49	

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LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 335	4	42.00	56P9-47 56TB3-B3					.10 .20	NO NO		49	
A 336	4	54.00	56P9-12 56TB1-H8					.10 .20	NO NO		49 65	
A 337	4	12.00	56P9-27 56E21					.10 .20	NO NO		49 28	
A 338	2	50.00			1.00 2.50	.75 2.25					31 31, 28	
A 338B	76	12.00	56TB2-S3 SHLD A338					.20 .20	NO NO		65	
A 338R			56P9-39 56TB2-N3					.10 .20	NO NO		49 65	
A 338Y			56P9-38 56TB2-R3					.10 .20	NO NO		49 65	
A 339	4	12.00	56P9-37 56E21					.10 .20	NO NO		49	
A 340	4	12.00	56P9-26 56E21					.10 .20	NO NO		49	
A 341	4	12.00	56P9-25 56E21					.10 .20	NO NO		49	
A 342	4	42.00	56P9-10 56TB3-F5					.10 .20	NO NO		49	
A 343	4	54.00	56P9-23 56TB1-S5					.10 .20	NO NO		49	

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LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 344	4	42.00	56P9-11 56TB3-D3					.10 .20	NO NO		49 65	
A 345	4	54.00	56P9-46 56TB1-U2					.10 .20	NO NO		49 66	
A 346	4	42.00	56P9-35 56TB3-B4					.10 .20	NO NO		49	
A 347	4	12.00	56P9-36 56E21					.10 .20	NO NO		49	
A 348	4	12.00	56P9-24 56E21					.10 .20	NO NO		49	
A 349	4	54.00	56P9-33 56TB1-L2					.10 .20	NO NO		49 64	
A 350	4	54.00	56P9-43 56TB1-M2					.10 .20	NO NO		49 64	
A 351	4	54.00	56P9-44 56TB1-T7					.10 .20	NO NO		49 64	
A 352	77	54.00									32 32	
A 352R			56P9-93 56TB1-D4					.10 .20	NO NO		49 66	
A 352Y			56P9-106 56TB1-D3					.10 .20	NO NO		49 66	
A 353	77	54.00									32 32	

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LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 353R			56P9-107 56TB1-A3					.10 .20	NO NO		49 66	
A 353Y			56P9-108 56TB1-A4					.10 .20	NO NO		49 66	
A 354	77	54.00									32 32	
A 354R			56P9-94 56TB1-B2					.10 .20	NO NO		49 66	
A 354Y			56P9-95 56TB1-A2					.10 .20	NO NO		49 66	
A 355	2	42.00			1.00 2.50	.75 2.25					31 31, 28	
A 355B	76	12.00	56TB3-H13 SHLD A355					.20 .20	NO NO		66	
A 355R			56P9-1 56TB3-D13					.10 .20	NO NO		49 66	
A 355Y			56P9-14 56TB3-D14					.10 .20	NO NO		49 66	
A 356	2	42.00			1.00 2.50	.75 2.25					31 31, 28	
A 356B	76	12.00	56TB3-H14 SHLD A356					.20 .20	NO NO		66	
A 356R			56P9-2 56TB3-F13					.10 .20	NO NO		49 66	

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LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 356Y			56P9-3 56TB3-F14					.10 .20	NO NO		49 66	
A 357	2	42.00			1.00 2.50	.75 2.25					31 31, 28	
A 357B	76	12.00	56TB3-H12 SHLD A357					.20 .20	NO NO		66	
A 357R			56P9-15 56TB3-C13					.10 .20	NO NO		49 66	
A 357Y			56P9-29 56TB3-C14					.10 .20	NO NO		49 66	
A 358	2	42.00			1.00 2.50	.75 2.25					31 31, 28	
A 358B	76		56E48 SHLD A358					.20 .20	NO NO			
A 358R			56P9-28 56TB3-N20					.10 .20	NO NO		49 66	
A 358Y			56P9-40 56TB3-N21					.10 .20	NO NO		49 66	
A 359	2	50.00			1.00 2.50	.75 2.25					31 31, 28	
A 359B	76	12.00	56TB2-V8 SHLD A359					.20 .20	NO NO		66	
A 359R			56P9-16 56TB2-U7					.10 .20	NO NO		49 65	

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LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 359Y			56P9-17 56TB2-U8					.10 .20	NO NO		49 66	
A 360	2	50.00			1.00 2.50	.75 2.25					31 31, 28	
A 360B	76	12.00	56TB2-M8 SHLD A360					.18 .20	NO NO		66	
A 360R			56P9-30 56TB2-N8					.10 .18	NO NO		49 65	
A 360Y			56P9-31 56TB2-N7					.10 .18	NO NO		49 66	
A 361	4	54.00	56P9-41 56TB1-C8					.10 .18	NO NO		49 65	
A 362	4	54.00	56P9-52 56TB1-C7					.10 .18	NO NO		49 65	
A 363	79	54.00									31 31	
A 363G			56P9-61 56TB1-B8					.10 .18	NO NO		49 65	
A 363N			56P9-51 56TB1-B7					.10 .18	NO NO		49 65	
A 363R			56P9-60 56TB1-A7					.10 .18	NO NO		49 65	
A 363Y			56P9-50 56TB1-A8					.10 .18	NO NO		49 65	

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LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 364	2	50.00			1.00 2.50	.75 2.25					31 31, 28	
A 364B	76	12.00	56TB2-F2 SHLD A364					.20 .20	NO NO		66	
A 364R			56P9-96 56TB2-H2					.10 .20	NO NO		49 66	
A 364Y			56P9-82 56TB2-G2					.10 .20	NO NO		49 66	
A 365	2	50.00			1.00 2.50	.75 2.25					31 31, 28	
A 365B	76	12.00	56TB2-F7 SHLD A365					.20 .20	NO NO		66	
A 365R			56P9-70 56TB2-H7					.10 .20	NO NO		49 66	
A 365Y			56P9-71 56TB2-G7					.10 .20	NO NO		49 66	
A 366	2	50.00			1.00 2.50	.75 2.25					31 31, 28	
A 366B	76	12.00	56TB2-S2 SHLD A366					.20 .20	NO NO		66	
A 366R			56P9-72 56TB2-N2					.10 .20	NO NO		49 66	
A 366Y			56P9-83 56TB2-R2					.10 .20	NO NO		49 66	

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LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 367	4	42.00	56P9-98 56TB3-D4					.10 .20	NO NO		49 64	
A 368	4	42.00	56P9-85 56TB3-C5					.10 .20	NO NO		49 64	
A 369	4	42.00	56P9-97 56TB3-D5					.10 .20	NO NO		49 64	
A 370	4	42.00	56P9-73 56TB3-C4					.10 .20	NO NO		49 64	
A 371	78	42.00									32 32	
A 371G			56P9-64 56TB3-G19					.10 .20	NO NO		49 64	
A 371R			56P9-74 56TB3-F19					.10 .20	NO NO		49 64	
A 371Y			56P9-75 56TB3-D19					.10 .20	NO NO		49 64	
A 372	77	42.00									32 32	
A 372R			56P9-87 56TB3-D9					.10 .20	NO NO		49 64	
A 372Y			56P9-88 56TB3-D10					.10 .20	NO NO		49 64	
A 373	77	42.00									32 32	

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LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 373R			56P9-100 56TB3-D7					.10 .20	NO NO		49 64	
A 373Y			56P9-101 56TB3-C7					.10 .20	NO NO		49 64	
A 374	77	42.00									32 32	
A 374R			56P9-89 56TB3-B7					.10 .20	NO NO		49 64	
A 374Y			56P9-102 56TB3-B8					.10 .20	NO NO		49 64	
A 375	77	42.00									32 32	
A 375R			56P9-90 56TB3-C9					.10 .20	NO NO		49 64	
A 375Y			56P9-103 56TB3-C10					.10 .20	NO NO		49 64	
A 376	77	42.00									32 32	
A 376R			56P9-91 56TB3-C17					.10 .20	NO NO		49 65	
A 376Y			56P9-92 56TB3-C16					.10 .20	NO NO		49 65	
A 377	77	42.00									32 32	

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LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 377R			56P9-104 56TB3-B9					.10 .20	NO NO		49 64	
A 377Y			56P9-105 56TB3-B10					.10 .20	NO NO		49 64	
A 378	77	42.00									32 32	
A 378R			56P9-76 56TB3-G17					.10 .20	NO NO		49 65	
A 378Y			56P9-77 56TB3-F17					.10 .20	NO NO		49 65	
A 379	77	42.00									32 32	
A 379R			56P9-42 56TB3-K19					.10 .20	NO NO		49 65	
A 379Y			56P9-53 56TB3-H19					.10 .20	NO NO		49 65	
A 380	4	42.00	56P9-62 56TB3-L19					.10 .20	NO NO		49 64	
A 381	4	42.00	56P9-54 56TB3-M19					.10 .20	NO NO		49 64	
A 382	4	42.00	56P9-63 56TB3-N19					.10 .20	NO NO		49 65	
A 383	77	42.00									32 32	

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LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 383R			56P9-86 56TB3-D8					.10 .20	NO NO		49 64	
A 383Y			56P9-99 56TB3-C8					.10 .20	NO NO		49 64	
A 384	4	50.00	56P9-84 56TB3-D6					.10 .20	NO NO		49 65	
A 385	4	50.00	56P9-32 56TB2-F4					.10 .20	NO NO		49 64	
A 386	77	42.00									32 32	
A 386R			56P9-21 56TB3-S20					.10 .20	NO NO		49 64	
A 386Y			56P9-7 56TB3-R19					.10 .20	NO NO		49 64	
A 387	78	40.00									32 32	
A 387G			56J9-5 56J22-232					.10 .10	NO NO		49 49	
A 387R			56J9-18 56J22-195					.10 .10	NO NO		49 49	
A 387Y			56J9-4 56J22-233					.10 .10	NO NO		49 49	
A 388	78	40.00									32 32	

MANNED SPACECRAFT CENTER HOUSTON, TEXAS	SIZE A	1023055	
SCALE-NONE	REV LTR A		SHEET 82 OF 120

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 388G			56J9-6 56J22-197					.10 .10	NO NO		49 49	
A 388R			56J9-7 56J22-235					.10 .10	NO NO		49 49	
A 388Y			56J9-20 56J22-198					.10 .10	NO NO		49 49	
A 389	78	40.00									32 32	
A 389G			56J9-17 56J22-192					.10 .10	NO NO		49 49	
A 389R			56J9-16 56J22-230					.10 .10	NO NO		49 49	
A 389Y			56J9-3 56J22-193					.10 .10	NO NO		49 49	
A 390	4	40.00	56J9-73 56TB3-F3					.10 .20	NO NO		49	
A 391	4	40.00	56J9-21 56TB3-K4					.10 .20	NO NO		49 64	
A 392	4	40.00	56J9-2 56TB3-M3					.10 .20	NO NO		49 64	
A 393	78	40.00									32 32	
A 393G			56J9-50 56J22-238					.10 .10	NO NO		49 49	

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LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 393R			56J9-41 56J22-237					.10 .10	NO NO		49 49	
A 393Y			56J9-40 56J22-200					.10 .10	NO NO		49 49	
A 394	4	40.00	56J9-72 56TB3-B11					.10 .20	NO NO		49 64	
A 395	4	40.00	56J9-97 56TB3-R6					.10 .20	NO NO		49 65	
A 396	4	40.00	56J9-98 56TB3-C1					.10 .20	NO NO		49 64	
A 397	4	40.00	56J9-104 56TB3-M4					.10 .20	NO NO		49 64	
A 398	4	40.00	56J9-86 56TB3-L1					.10 .20	NO NO		49 65	
A 399	4	40.00	56J9-102 56TB3-H3					.10 .20	NO NO		49 64	
A 400	4	40.00	56J9-76 56TB3-L5					.10 .20	NO NO		49 64	
A 401	79	40.00									31 31	
A 401G			56J9-87 56TB3-H1					.10 .20	NO NO		49 64	
A 401N			56J9-88 56TB3-G2					.10 .20	NO NO		49 64	

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LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 401R			56J9-100 56TB3-G1					.10 .20	NO NO		49 64	
A 401Y			56J9-101 56TB3-H2					.10 .20	NO NO		49 64	
A 402	4	40.00	56J9-90 56TB3-N6					.10 .20	NO NO		49 65	
A 403	4	40.00	56J9-74 56TB3-H5					.10 .20	NO NO		49 64	
A 404	4	40.00	56J9-59 56TB3-G18					.10 .20	NO NO		49 64	
A 405	4	40.00	56J9-58 56TB3-K18					.10 .20	NO NO		49 64	
A 406	4	12.00	56J9-60 56E56					.10 .20	NO NO		49 27	
A 407	2	39.00			1.00 2.50	.75 2.25					31 31, 28	
A 407B	76	12.00	56E44 SHLD A407					.20 .20	NO NO			
A 407R			56E58 56J21-17					.20 .10	NO NO		28 49	
A 407Y			56J9-70 56J21-16					.10 .10	NO NO		49 49	
A 408	4	40.00	56J9-66 56TB3-H6					.10 .20	NO NO		49 65	

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LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 409	77	40.00									32 32	
A 409R			56J9-68 56TB3-B13					.10 .20	NO NO		49 65	
A 409Y			56J9-81 56TB3-B12					.10 .20	NO NO		49 65	
A 410	4	53.00	56J9-67 56TB1-G1					.10 .20	NO NO		49 65	
A 411	4	49.00	56J9-93 56TB2-S4					.10 .20	NO NO		49 65	
A 412	4	49.00	56J9-79 56TB2-S5					.10 .20	NO NO		49 65	
A 413	4	49.00	56J9-106 56TB2-S6					.10 .20	NO NO		49 65	
A 414	4	49.00	56J9-78 56TB2-S7					.10 .20	NO NO		49 65	
A 415	4	12.00	56J9-42 56E56					.10 .20	NO NO		49	
A 416	77	49.00									32 32	
A 416R			56J9-80 56TB2-K1					.10 .20	NO NO		49	
A 416Y			56J9-69 56TB2-L1					.10 .20	NO NO		49	

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LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 420	4	12.00	56J9-36 56E56					.10 .20	NO NO		49	
A 425	3	40.00			1.00 2.50	.75 2.25					31 31, 28	
A 425B	76	12.00	56TB3-M9 SHLD A425					.20 .20	NO NO		65	
A 425G			56J9-24 56TB3-M12					.10 .20	NO NO		49 64	
A 425R			56J9-10 56TB3-M10					.10 .20	NO NO		49 64	
A 425Y			56J9-23 56TB3-M11					.10 .20	NO NO		49 64	
A 426	2	40.00			1.00 2.50	.75 2.25					31 31, 28	
A 426B	76	12.00	56TB3-G12 SHLD A426					.20 .20	NO NO		65	
A 426R			56J9-19 56TB3-G11					.10 .20	NO NO		49 64	
A 426Y			56J9-33 56TB3-G12					.10 .20	NO NO		49	
A 427	2	40.00			1.00 2.50	.75 2.25					31 31, 28	
A 427B	76	12.00	56TB3-F12 SHLD A427					.20 .20	NO NO		65	

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LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 427R			56J9-35 56TB3-F11					.10 .20	NO NO		49 64	
A 427Y			56J9-34 56TB3-F12					.10 .20	NO NO		49	
A 428	4	40.00	56J9-99 56TB3-L18					.10 .20	NO NO		49 64	
A 429	4	40.00	56J9-1 56TB3-L22					.10 .20	NO NO		49	
A 431	77	49.00									32 32	
A 431R			56J9-32 56TB2-A2					.10 .20	NO NO		49 65	
A 431Y			56J9-44 56TB2-A1					.10 .20	NO NO		49 65	
A 433	2	39.00			3.00 2.50	2.75 2.25					31 31, 28	
A 433B	76	12.00	56E44 SHLD A433					.20 .20	NO NO			
A 433R			56E58 56J21-87					.20 .10	NO NO		 49	
A 433Y			56J9-30 56J21-86				2.00	.10 .10	NO NO		49 49	
A 434	2	39.00			3.00 2.50	2.75 2.25					31 31, 28	

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LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 434B	76	12.00	56E44 SHLD A434					.20 .20	NO NO			
A 434R			56E58 56J21-89					.20 .10	NO NO		 49	
A 434Y			56J9-31 56J21-88				2.00	.10 .10	NO NO		49 49	
A 435	4	40.00	56J9-51 56TB3-M22					.10 .20	NO NO		49	
A 436	4	40.00	56J9-83 56TB3-L15					.10 .20	NO NO		49 64	
A 437	2	39.00			3.00 2.50	2.75 2.25					31 31, 28	
A 437B	76	12.00	56E44 SHLD A437					.20 .20	NO NO			
A 437R			56E58 56J21-55					.20 .10	NO NO		 49	
A 437Y			56J9-25 56J21-54				2.00	.10 .10	NO NO		49 49	
A 438	4	40.00	56J9-92 56TB3-K1					.10 .20	NO NO		49 64	
A 439	4	40.00	56J9-94 56TB3-D1					.10 .20	NO NO		49 64	
A 440	2	39.00			1.00 2.50	.75 2.25					31, 28 31	

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LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 440A	76	12.00	SHLD A440 56E44					.20 .20	NO NO			
A 440R			56J21-120 56E58					.10 .20	NO NO		49	
A 440Y			56J21-119 56E56					.10 .20	NO NO		49	
A 441	4	40.00	56J9-103 56TB3-M5					.10 .20	NO NO		49 64	
A 442	4	40.00	56J9-85 56TB3-G4					.10 .20	NO NO		49 64	
A 443	4	40.00	56J9-89 56TB3-G3					.10 .20	NO NO		49 64	
A 444	4	40.00	56J9-75 56TB3-K5					.10 .20	NO NO		49 64	
A 445	4	40.00	56J9-71 56TB3-M20					.10 .20	NO NO		49 66	
A 446	4	40.00	56J9-105 56TB3-K2					.10 .20	NO NO		49 64	
A 447	4	42.00	56J9-95 56P10-48					.10 .10	NO NO		49 49	
A 448	77	40.00									32 32	
A 448R			56J9-65 56P10-39					.10 .10	NO NO		49 49	

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LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 448Y			56J9-77					.10	NO		49	
			56P10-38					.10	NO		49	
A 449	2	39.00			3.00	2.75					31	
					2.50	2.25					31, 28	
A 449B	76	12.00	56E44					.20	NO			
			SHLD A449					.20	NO			
A 449R			56J9-37				2.00	.10	NO		49	
			56J21-18					.10	NO		49	
A 449Y			56E58					.20	NO			
			56J21-19					.10	NO		49	
A 450	4	49.00	56J9-26					.10	NO		49	
			56TB2-D6					.20	NO			
A 451	4	4C.00	56J9-91					.10	NO		49	
			56TB3-F22					.20	NO			
A 452	4	54.00	56P10-13					.10	NO		49	
			56TB1-S5					.20	NO		66	
A 453	4	42.00	56P10-10					.10	NO		49	
			56J9-29					.10	NO		49	
A 454	4	42.00	56P10-12					.10	NO		49	
			56TB3-F5					.20	NO		66	
A 455	4	50.0C	56P10-24					.10	NO		49	
			56TB2-S8					.20	NO		65	
A 458	4	12.00	56TB2-D5					.20	NO		65	
			56E48					.20	NO			

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 460	4	42.00	56P1C-49					.10	NO		49	
			56TB3-B14					.20	NO		65	
A 461	4	41.00	56P10-8					.10	NO		49	
			56J22-171					.10	NO		49	
A 462	4	42.0C	56P10-9					.10	NO		49	
			56TB3-F1					.20	NO		64	
A 464	4	49.00	56J10-2					.10	NO		49	
			56TB3-F3					.20	NO		66	
A 465	4	49.00	56J1C-6					.10	NO		49	
			56TB3-M6					.20	NO		66	
A 466	4	61.00	56J10-7					.10	NO		49	
			56TB1-F1					.20	NO			
A 467	77	48.00									32	
											32	
A 467R			56J10-38					.10	NO		49	B
			56J21-84					.10	NO		49	
A 467Y			56E25					.20	NO		28	B
			56J21-85					.10	NO		49	
A 468	77	48.00									32	
											32	
A 468R			56E25					.20	NO			B
			56J21-13					.10	NO		49	
A 468Y			56J10-49					.10	NO		49	B
			56J21-12					.10	NO		49	

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 469	4	48.00	56J10-72					.10	NO		49	A
			56J21-141					.10	NO		49	
A 470	77	48.00									32	
											32	
A 470R			56J10-42					.10	NO		49	A
			56J21-47					.10	NO		49	
A 47CY			56E24					.20	NO		28	A
			56J21-48					.10	NO		49	
A 471	77	48.00									32	
											32	
A 471R			56J10-20					.10	NO		49	A
			56J21-82					.10	NO		49	
A 471Y			56E24					.20	NO			A
			56J21-83					.10	NO		49	
A 472	77	48.00									32	
											32	
A 472R			56J10-36					.10	NO		49	B
			56J21-150					.10	NO		49	
A 472Y			56E25					.20	NO			B
			56J21-151					.10	NO		49	
A 473	4	48.00	56J10-71					.10	NO		49	A
			56J21-75					.10	NO		49	
A 474	78	49.00									32	
											32	

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 474G			56J10-5					.10	NO		49	
			56TB3-B5					.20	NO		66	
A 474R			56J10-4					.10	NO		49	
			56TB3-B3					.20	NO		66	
A 474Y			56J10-3					.10	NO		49	
			56TB3-B4					.20	NO		66	
A 475	4	61.00	56J10-12					.10	NO		49	
			56TB1-F8					.20	NO		65	
A 476	4	48.00	56J10-70					.10	NO		49	A
			56J21-3					.10	NO		49	
A 477	4	48.00	56J10-57					.10	NO		49	
			56J21-108					.10	NO		49	
A 478	4	61.00	56J10-9					.10	NO		49	
			56TB1-H5					.20	NO		64	
A 479	78	61.00									32	
											32	
A 479G			56J10-22					.10	NO		49	
			56TB1-K3					.20	NO		65	
A 479R			56J10-24					.10	NO		49	
			56TB1-K5					.20	NO		65	
A 479Y			56J10-21					.10	NO		49	
			56TB1-K4					.20	NO		65	
A 480	78	61.00									32	
											32	

	LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A	480G			56J10-23 56TB1-K8					.10 .20	NO NO		49 65	
A	480R			56J10-25 56TB1-K6					.10 .20	NO NO		49 65	
A	480Y			56J10-26 56TB1-K7					.10 .20	NO NO		49	
A	481	4	48.00	56J10-59 56J21-40					.10 .10	NO NO		49 49	
A	482	77	48.00									32 32	
A	482R			56J10-32 56J21-80					.10 .10	NO NO		49 49	A
A	482Y			56E23 56J21-81					.20 .10	NO NO		28 49	A
A	483	77	48.00									32 32	
A	483R			56J10-17 56J21-6					.10 .10	NO NO		49 49	A
A	483Y			56E23 56J21-7					.20 .10	NO NO		 49	A
A	484	77	48.00									32 32	
A	484R			56J10-18 56J21-214					.10 .10	NO NO		49 49	A

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	LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A	484Y			56E23 56J21-215					.20 .10	NO NO		 49	A
A	485	77	48.00									32 32	
A	485R			56J10-40 56J21-179					.10 .10	NO NO		49 49	A
A	485Y			56E23 56J21-180					.20 .10	NO NO		 49	A
A	486	77	48.00									32 32	
A	486R			56J10-41 56J21-146					.10 .10	NO NO		49 49	A
A	486Y			56E23 56J21-147					.20 .10	NO NO		 49	A
A	487	77	48.00									32 32	
A	487R			56J10-19 56J21-113					.10 .10	NO NO		49 49	A
A	487Y			56E23 56J21-114					.20 .10	NO NO		 49	A
A	488	77	48.00									32 32	
A	488R			56J10-33 56J21-45					.10 .10	NO NO		49 49	A

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	LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A	488Y			56E23 56J21-46					.20 .10	NO NO		 49	A
A	489	77	48.00									32 32	
A	489R			56J10-44 56J21-8					.10 .10	NO NO		49 49	A
A	489Y			56E24 56J21-9					.20 .10	NO NO		 49	A
A	490	77	48.00									32 32	
A	490R			56J10-43 56J21-216					.10 .10	NO NO		49 49	A
A	490Y			56E24 56J21-217					.20 .10	NO NO		 49	A
A	491	77	48.00									32 32	
A	491R			56J10-53 56J21-181					.10 .10	NO NO		49 49	A
A	491Y			56E24 56J21-182					.20 .10	NO NO		 49	A
A	492	77	48.00									32 32	
A	492R			56J10-51 56J21-148					.10 .10	NO NO		49 49	A

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	LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A	492Y			56E24 56J21-149					.20 .10	NO NO		 49	A
A	493	77	48.00									32 32	
A	493R			56J10-64 56J21-115					.10 .10	NO NO		49 49	A
A	493Y			56E24 56J21-116					.20 .10	NO NO		 49	A
A	494	77	48.00									32 32	
A	494R			56J10-73 56J21-210					.10 .10	NO NO		49 49	A
A	494Y			56E22 56J21-211					.20 .10	NO NO		28 49	A
A	495	77	48.00									32 32	
A	495R			56J10-74 56J21-175					.10 .10	NO NO		49 49	A
A	495Y			56E22 56J21-176					.20 .10	NO NO		 49	A
A	496	77	48.00									32 32	
A	496R			56J10-60 56J21-142					.10 .10	NO NO		49 49	A

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SCALE-NONE REV LTR 1 A SHEET 98 OF 120

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 496Y			56E22 56J21-143					.20 .10	NO NO		28 49	A
A 497	77	48.00									32 32	
A 497R			56J10-28 56J21-109					.10 .10	NO NO		49 49	A
A 497Y			56E22 56J21-110					.20 .10	NO NO		49	A
A 498	77	48.00									32 32	
A 498R			56J10-29 56J21-76					.10 .10	NO NO		49 49	A
A 498Y			56E22 56J21-77					.20 .10	NO NO		49	A
A 499	77	48.00									32 32	
A 499R			56J10-30 56J21-41					.10 .10	NO NO		49 49	A
A 499Y			56E22 56J21-42					.20 .10	NO NO		49	A
A 500	77	48.00									32 32	
A 500R			56J10-61 56J21-212					.10 .10	NO NO		49 49	A

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SCALE - NONE

REV LTR A

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 500Y			56E22 56J21-213					.20 .10	NO NO		49	A
A 501	77	48.00									32 32	
A 501R			56J10-62 56J21-177					.10 .10	NO NO		49 49	A
A 501Y			56E22 56J21-178					.20 .10	NO NO		49	A
A 502	77	48.00									32 32	
A 502R			56J10-63 56J21-144					.10 .10	NO NO		49 49	A
A 502Y			56E22 56J21-145					.20 .10	NO NO		49	A
A 503	77	48.00									32 32	
A 503R			56J10-14 56J21-111					.10 .10	NO NO		49 49	A
A 503Y			56E23 56J21-112					.20 .10	NO NO		49	A
A 504	77	48.00									32 32	
A 504R			56J10-16 56J21-43					.10 .10	NO NO		49 49	A

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REV LTR A

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 504Y			56E23 56J21-44					.20 .10	NO NO		49	A
A 505	77	48.00									32 32	
A 505R			56J10-31 56J21-4					.10 .10	NO NO		49 49	A
A 505Y			56E22 56J21-5					.20 .10	NO NO		49	A
A 506	77	48.00									32 32	
A 506R			56J10-15 56J21-78					.10 .10	NO NO		49 49	A
A 506Y			56E23 56J21-79					.20 .10	NO NO		49	A
A 507	4	49.00	56J10-8 56TB3-M22					.10 .20	NO NO		49 65	
A 508	4	61.00	56J10-10 56TB1-G5					.10 .20	NO NO		49 64	
A 509	4	48.00	56J10-58 56J21-39					.10 .10	NO NO		49 49	
A 510	77	48.00									32 32	
A 510R			56J10-39 56J21-14					.10 .10	NO NO		49 49	B

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LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 510Y			56E25 56J21-15					.20 .10	NO NO		49	B
A 511	77	48.00									32 32	
A 511R			56J10-37 56J21-117					.10 .10	NO NO		49 49	B
A 511Y			56E25 56J21-118					.20 .10	NO NO		49	B
A 512	4	48.00	56J10-56 56J21-173					.10 .10	NO NO		49 49	
A 513	4	48.00	56J10-55 56J21-174					.10 .10	NO NO		49 49	
A 514	77	48.00									32 32	
A 514R			56J10-35 56J21-183					.10 .10	NO NO		49 49	B
A 514Y			56E25 56J21-184					.20 .10	NO NO		49	B
A 515	77	48.00									32 32	
A 515R			56J10-47 56J21-185					.10 .10	NO NO		49 49	B
A 515Y			56E25 56J21-186					.20 .10	NO NO		49	B

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REV LTR A

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 516	77	48.00									32	
											32	
A 516R			56J10-34					.10	NO		49	B
			56J21-218					.10	NO		49	
A 516Y			56E25					.20	NO			B
			56J21-219					.10	NO		49	
A 517	77	48.00									32	
											32	
A 517R			56J10-48					.10	NO		49	B
			56J21-220					.10	NO		49	
A 517Y			56E25					.20	NO			B
			56J21-221					.10	NO		49	
A 520	4	48.00	56J10-75					.10	NO		49	A
			56J21-209					.10	NO		49	
A 521	4	61.00	56J10-13					.10	NO		49	
			56TB1-K7					.20	NO		66	
A 522	4	48.00	56J10-45					.10	NO		49	B
			56J21-10					.10	NO		49	
A 523	4	48.00	56J10-46					.10	NO		49	B
			56J21-11					.10	NO		49	
A 548	4	12.00	56TB3-B20					.20	NO		66	
			56E12					.20	NO			
A 549	4	55.00	56E20					.20	NO			
			56TB2-D6					.20	NO		66	

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LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 550	4	49.00	56E21					.20	NO			
			56TB2-D5					.20	NO			
A 551	4	12.00	56E25					.20	NO			B
			56J10-69					.10	NO		49	
A 552	4	12.00	56E24					.20	NO			A
			56J10-82					.10	NO		49	
A 554	4	12.00	56E23					.20	NO			A
			56E22					.20	NO			
A 555	4	12.00	56E23					.20	NO			A
			56E24					.20	NO			
A 556	4	40.00	56E19					.20	NO			
			56TB1-S7					.20	NO		64	
A 557	4	40.00	56E8					.20	NO			
			56TB2-D1					.20	NO		64	
A 558	77	40.00									32	
											32	
A 558R			56E14					.20	NO			
			56TB2-K1					.20	NO		66	
A 558Y			56E13					.20	NO			
			56TB2-L1					.20	NO		66	
A 559	4	12.00	56TB3-S21					.20	NO		65	
			56E6					.20	NO			
A 560	77	40.00									32	
											32	

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LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 560R			56E17					.20	NO			
			56TB1-H7					.20	NO		65	
A 560Y			56E16					.20	NO			
			56TB1-G7					.20	NO		65	
A 561	77	40.00									32	
											32	
A 561R			56E9					.20	NO			
			56TB1-S1					.20	NO		65	
A 561Y			56E10					.20	NO			
			56TB1-S2					.20	NO			
A 564	77	40.00									32	
											32	
A 564R			56E3					.20	NO			
			56TB1-G4					.20	NO		65	
A 564Y			56E4					.20	NO			
			56TB1-H4					.20	NO		65	
A 565	4	50.00	56J8-50					.10	NO		49	
			56TB1-F1					.20	NO		65	
A 566	4	18.00	56E44					.20	NO			
			56E57					.20	NO			
A 567	77	47.00									32	
											32	
A 567R			56E7					.20	NO		27	
			56TB3-D2					.20	NO		65	

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LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 567Y			56E11					.20	NO			
			56TB3-C3					.20	NO		66	
A 568	4	12.00	56J21-187					.10	NO		49	
			56E64					.20	NO			
A 569	4	12.00	56E82					.20	NO			
			56E65					.20	NO			
A 570	4	12.00	56E82					.20	NO		31, 81	
			56E62					.20	NO			
A 571	4	12.00	56J21-107					.10	NO		49	
			5E63					.20	NO			
A 572	77	12.00									32	
											32	
A 572R			56J1-1					.10	NO		49	
			56E1					.20	NO		28	
A 572Y			56J1-14					.10	NO		49	
			56E2					.20	NO		27	
A 573	78	12.00									32	
											32	
A 573G			56J1-11					.10	NO		49	
			56E1					.20	NO			
A 573R			56J1-25					.10	NO		49	
			56E1					.20	NO			
A 573Y			56J1-12					.10	NO		49	
			56E5					.20	NO		27	

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LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 574	77	12.00									32 32	
A 574R			56J2-1 56E1					.10 .20	NO NO		49	
A 574Y			56J2-14 56E2					.10 .20	NO NO		49	
A 575	78	12.00									32 32	
A 575G			56J2-11 56E1					.10 .20	NO NO		49	
A 575R			56J2-25 56E1					.10 .20	NO NO		49	
A 575Y			56J2-12 56E5					.10 .20	NO NO		49	
A 576	78	12.00									32 32	
A 576G			56J3-11 56E1					.10 .20	NO NO		49	
A 576R			56J3-25 56E1					.10 .20	NO NO		49	
A 576Y			56J3-12 56E5					.10 .20	NO NO		49	
A 577	78	40.00									32 32	

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LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 577G			56E5 56TB2-H5					.20 .20	NO NO		 64	
A 577R			56E1 56TB2-G4					.20 .20	NO NO		 66	
A 577Y			56E2 56TB2-H4					.20 .20	NO NO		 65	
A 578	77	12.00									32 32	
A 578R			56J1-3 56E7					.10 .20	NO NO		49	
A 578Y			56J1-2 56E11					.10 .20	NO NO		49 27	
A 579	77	12.00									32 32	
A 579R			56J2-3 56E7					.10 .20	NO NO		49	
A 579Y			56J2-2 56E11					.10 .20	NO NO		49	
A 580	77	12.00									32 32	
A 580R			56J3-3 56E7					.10 .20	NO NO		49	
A 580Y			56J3-2 56E11					.10 .20	NO NO		49	

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LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 581	4	12.00	56J3-16 56E6					.10 .20	NO NO		49	
A 582	4	12.00	56J3-15 56E8					.10 .20	NO NO		49	
A 583	77	12.00									32 32	
A 583R			56J5-50 56E17					.10 .20	NO NO		49	
A 583Y			56J5-60 56E16					.10 .20	NO NO		49	
A 584	78	12.00									32 32	
A 584G			56J4-12 56E14					.10 .20	NO NO		49	
A 584R			56J4-25 56E13					.10 .20	NO NO		49 28	
A 584Y			56J4-11 56E13					.10 .20	NO NO		49	
A 585	78	12.00									32 32	
A 585G			56J5-17 56E14					.10 .20	NO NO		49	
A 585R			56J5-4 56E13					.10 .20	NO NO		49	

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LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 585Y			56J5-18 56E13					.10 .20	NO NO		49	
A 586	77	12.00									32 32	
A 586R			56J5-1 56E14					.10 .20	NO NO		49	
A 586Y			56J5-14 56E13					.10 .20	NO NO		49	
A 587	4	6.00	56TB1-N4 56TB1-N5					.20 .20	NO NO		66	
A 588	4	6.00	56TB1-N5 56TB1-N8					.20 .20	NO NO		66	
A 591	4	6.00	56TB3-T3 56TB3-R3					.20 .20	NO NO		66	
A 592	4	6.00	56TB3-R3 56TB3-N3					.20 .20	NO NO		66	
A 593	4	6.00	56TB3-D15 56TB3-L20					.20 .20	NO NO		66 65	
A 594	4	6.00	56TB3-L22 56TB3-D15					.20 .20	NO NO		65	
A 595	4	6.00	56TB3-K20 56TB3-C15					.20 .20	NO NO		65	
A 596	4	6.00	56TB3-K22 56TB3-C15					.20 .20	NO NO		65 66	

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LEAD IDENT		WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A	598	77	47.00									32	
												32	
A	598R			56P5-D					.20	NO		52	
				56TB2-U2					.20	NO		65	
A	598Y			56P5-E					.20	NO		52	
				56TB2-T3					.20	NO		65	
A	599	77	39.00									32	
												32	
A	599R			56J4-3					.10	NO		49	
				56TB2-U1					.18	NO			
A	599Y			56J4-2					.10	NO		49	
				56TB2-T2					.20	NO			
A	600	77	41.00									32	
												32	
A	600R			56J5-3					.10	NO		49	
				56TB2-U1					.20	NO		65	
A	600Y			56J5-2					.10	NO		49	
				56TB2-T2					.20	NO		66	
A	601	4	6.00	56TB2-L4					.20	NO		66	
				56TB2-M4					.20	NO		65	
A	602	75	48.00									31	
												31	
A	602G			56P1-106					.10	NO		49	
				56TB1-N1					.20	NO			

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LEAD IDENT		WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A	602N			56P1-90					.10	NO		49	
				56TB1-M1					.20	NO			
A	602R			56P1-103					.10	NO		49	
				56TB1-R1					.20	NO			
A	602Y			56P1-108					.10	NO		49	
				56TB1-T1					.20	NO		66	
A	603	75	50.00									31	
												31	
A	603G			56J8-46					.10	NO		49	
				56TB1-R3					.20	NO			
A	603N			56J8-19					.10	NO		49	
				56TB1-R2					.20	NO			
A	603R			56J8-55					.10	NO		49	
				56TB1-N3					.20	NO			
A	603Y			56J8-36					.10	NO		49	
				56TB1-R2					.20	NO			
A	604	73	53.00									32	
												32	
A	604R			56J9-55					.10	NO		49	
				56TB1-N3					.20	NO		65	
A	604Y			56J9-46					.10	NO		49	
				56TB1-R3					.20	NO		65	
A	605	75	53.00									31	
												31	

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LEAD IDENT		WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A	605G			56J9-64					.10	NO		49	
				56TB1-N1					.20	NO		65	
A	605N			56J9-63					.10	NO		49	
				56TB1-M1					.20	NO		65	
A	605R			56J9-54					.10	NO		49	
				56TB1-R1					.20	NO		65	
A	605Y			56J9-84					.10	NO		49	
				56TB1-K1					.20	NO		65	
A	606	75	42.00									31	
												31	
A	606G			56J9-53					.10	NO		49	
				56P10-107					.10	NO		49	
A	606N			56J9-52					.10	NO		49	
				56P10-108					.10	NO		49	
A	606R			56J9-61					.10	NO		49	
				56P10-106					.10	NO		49	
A	606Y			56J9-62					.10	NO		49	
				56P10-93					.10	NO		49	
A	607	73	42.00									32	
												32	
A	607R			56P10-69					.10	NO		49	
				56TB3-L14					.20	NO			
A	607Y			56P10-68					.10	NO		49	
				56TB3-K14					.20	NO			

MANNED SPACECRAFT CENTER
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SIZE A
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SCALE - NONE
REV LTR ✓ A
SHEET 113 OF 120

LEAD IDENT		WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A	608	73	28.00									32	
												32	
A	608R			56P11-N					.25	NO		53	
				56TB3-L14					.20	NO		65	
A	608Y			56P11-K					.25	NO		53	
				56TB3-K14					.20	NO		65	
A	609	5	28.00	56P11-B					.25	NO		53	
				56TB3-C20					.20	NO			
A	610	5	28.00	56P11-B					.25	NO			
				56TB3-C20					.20	NO			
A	611	5	28.00	56P11-B					.25	NO			
				56TB3-C20					.20	NO		66	
A	612	5	28.00	56P11-C					.25	NO		53	
				56TB3-C21					.20	NO			
A	613	5	28.00	56P11-C					.25	NO			
				56TB3-C21					.20	NO			
A	614	5	28.00	56P11-C					.25	NO			
				56TB3-C21					.20	NO		66	
A	615	5	28.00	56P12-B					.25	NO		53	
				56TB3-D20					.20	NO			
A	616	5	28.00	56P12-B					.25	NO			
				56TB3-D20					.20	NO			
A	617	5	28.00	56P12-B					.25	NO			
				56TB3-D20					.20	NO		66	

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SHEET 114 OF 120

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 618	5	28.00	56P12-C 56TB3-D21					.25 .20	NO NO		53	
A 619	5	28.00	56P12-C 56TB3-D21					.25 .20	NO NO			
A 620	5	28.00	56P12-C 56TB3-D21					.25 .20	NO NO		66	
A 621	5	28.00	56P12-M 56TB3-C22					.25 .20	NO NO		53	
A 622	5	28.00	56P12-M 56TB3-C22					.25 .20	NO NO		65	
A 623	5	28.00	56P11-M 56TB3-D22					.25 .20	NO NO		53	
A 624	5	28.00	56P11-M 56TB3-D22					.25 .20	NO NO		65	
A 625	5	28.00	56P11-H 56TB3-H21					.25 .20	NO NO		53	
A 626	5	28.00	56P11-H 56TB3-H21					.25 .20	NO NO			
A 627	5	28.00	56P11-H 56TB3-H21					.25 .20	NO NO		66	
A 628	5	28.00	56P12-H 56TB3-H22					.25 .20	NO NO		53	
A 629	5	28.00	56P12-H 56TB3-H22					.25 .20	NO NO			

MANNED SPACECRAFT CENTER HOUSTON, TEXAS	SIZE A	1023055
SCALE - NONE	REV LTR A	SHEET 115 OF 120

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 630	5	28.00	56P12-H 56TB3-H22					.25 .20	NO NO		66	
A 631	5	28.00	56P11-L 56TB3-F21					.25 .20	NO NO		53 66	
A 632	5	28.00	56P12-L 56TB3-F22					.25 .20	NO NO		53 66	
A 633	5	28.00	56P11-A 56TB3-G21					.25 .20	NO NO		53 64	
A 634	5	35.00	56P11-A 56J21-1					.25 .10	NO NO		49	
A 635	5	35.00	56P11-A 56J21-73					.25 .10	NO NO		49	
A 636	5	28.00	56P12-A 56TB3-G22					.25 .20	NO NO		53 64	
A 637	5	35.00	56P12-A 56J21-139					.25 .10	NO NO		49	
A 638	5	35.00	56P12-A 56J21-207					.25 .10	NO NO		49	
A 639	5	35.00	56P11-J 56J21-2					.25 .10	NO NO		53 49	
A 640	5	35.00	56P11-J 56J21-74					.25 .10	NO NO		49	
A 641	5	35.00	56P12-J 56J21-140					.25 .10	NO NO		53 49	

MANNED SPACECRAFT CENTER HOUSTON, TEXAS	SIZE A	1023055
SCALE - NONE	REV LTR A	SHEET 116 OF 120

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 642	5	35.00	56P12-J 56J21-208					.25 .10	NO NO		49	
A 643	5	28.00	56P11-G 56TB3-D15					.25 .20	NO NO		53	
A 644	5	28.00	56P11-G 56TB3-K20					.25 .20	NO NO			
A 645	5	28.00	56P11-G 56TB3-L21					.25 .20	NO NO		65	
A 646	5	28.00	56P12-G 56TB3-E15					.25 .20	NO NO		53	
A 647	5	28.00	56P12-G 56TB3-K22					.25 .20	NO NO			
A 648	5	28.00	56P12-G 56TB3-L20					.25 .20	NO NO			
A 649	5	39.00	56P11-D 56TB1-N8					.25 .20	NO NO		53	
A 650	5	39.00	56P11-D 56TB1-S6					.25 .20	NO NO			
A 651	5	35.00	56P11-F 56TB2-M3					.25 .20	NO NO		53 64	
A 652	5	35.00	56P11-F 56TB2-D4					.25 .20	NO NO		65	
A 653	5	28.00	56P11-F 56TB3-N3					.25 .20	NO NO			

MANNED SPACECRAFT CENTER HOUSTON, TEXAS	SIZE A	1023055
SCALE - NONE	REV LTR A	SHEET 117 OF 120

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 654	5	35.00	56P11-E 56TB2-M7					.25 .20	NO NO		53 64	
A 655	5	35.00	56P11-E 56TB2-V4					.25 .20	NO NO			
A 656	5	39.00	56P12-D 56TB1-N4					.25 .20	NO NO		53	
A 657	5	28.00	56P12-D 56TB3-S3					.25 .20	NO NO			
A 658	5	28.00	56P12-E 56TB3-T3					.25 .20	NO NO		53	
A 659	5	39.00	56P12-E 56TB1-S3					.25 .20	NO NO			
A 660	5	35.00	56P12-F 56TB2-M1					.25 .20	NO NO		53 64	
A 661	5	35.00	56P12-F 56TB2-L4					.25 .20	NO NO			
A 662	5	39.00	56P12-F 56TB1-D7					.25 .20	NO NO			
A 663	74	54.00									32 32	
A 663G			56P10-81 56TB1-T2					.10 .20	NO NO		49 66	
A 663R			56P10-94 56TB1-R2					.10 .20	NO NO		49 66	

MANNED SPACECRAFT CENTER HOUSTON, TEXAS	SIZE A	1023055
SCALE - NONE	REV LTR A	SHEET 118 OF 120

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 663Y			56P10-95 56TB1-S2					.10 .20	NO NO		49 66	
A 664	4	6.00	56TB3-B15 56TB3-T15					.20 .20	NO NO		65	
A 665	4	42.00	56P10-1 56TB3-B20					.10 .20	NO NO		49	
A 667	4	40.00	56J9-15 56TB3-F1					.10 .18	NO NO		49 65	
A 668	4	40.00	56J9-14 56TB3-F2					.10 .18	NO NO		49 64	
A 669	77	45.00									32 32	
A 669R			56J9-96 56TB2-U3					.10 .18	NO NO		49 66	
A 669Y			56J9-82 56TB2-U2					.10 .18	NO NO		49	
A 670	77	40.00									32 32	
A 670R			56J9-49 56TB3-B16					.10 .18	NO NO		49	
A 670Y			56J9-38 56TB3-B17					.10 .18	NO NO		49	
A 671	1	40.00			1.00 2.50	.75 2.25					32 32, 28	

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 671B	76	12.00	56TB3-F8 SHLD A671					.20 .20	NO NO		65	
A 671Y			56J9-48 56TB3-G8					.10 .18	NO NO		49 64	
A 672	1	40.00			1.00 2.50	.75 2.25					32 32, 28	
A 672B	76	12.00	56TB3-F7 SHLD A672					.20 .20	NO NO		65	
A 672Y			56J9-56 56TB3-G7					.10 .18	NO NO		49 64	
A 673	4	40.00	56J9-47 56TB3-A10					.10 .18	NO NO		49 64.	

APPLICATION		REVISIONS			
NEXT ASSY	USED ON	SYM	DESCRIPTION	DATE	APPROVAL
1014606-041		A	INITIAL RELEASE CLASS A PER TDRR 26127	13 JAN 66	WK
		B	REVISED PER TDRR 28404	9 MAY 66	JJJ JRS
		C	REVISED PER TDRR 30677	15 SEP 66	MEM

Ⓜ

REV	A	C	C	A	A	A	C	C	A	C	A	C	C	C	A	C	C	C	C	C	C	C	C	A	A	A
SHEET	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46

REV STATUS OF SHEETS	REV				C	C	C	A	A	B	A	A	C	C	C	C	C	C	A	A	C	C	C	A
	SHEET				1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20

AC ELECTRONICS DIVISION
GENERAL MOTORS CORP. MILWAUKEE WIS.

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

DRAWN L Krahn DATE 21 OCT 65
CHECKED N.E. Abraham FEB 8 '66
APPROVAL BC Watson FEB 8, 66
APPROVAL

WIRING HARNESS "A"
AGE INTERCONNECT

A. C. METZGER
NASA APPROVAL
MIT APPROVAL
CONTRACT NAS9-497

CODE IDENT NO.	SIZE		REV
99974		1023055	C
SCALE		SHEET 1 OF 120	

REVISION STATUS OF SHEETS

SH	REV	SH	REV	SH	REV	SH	REV	SH	REV	SH	REV	SH	REV	SH	REV
47	A	81	C	115	C										
48	A	82	C	116	C										
49	A	83	C	117	C										
50	A	84	C	118	C										
51	A	85	C	119	C										
52	C	86	C	120	C										
53	C	87	C												
54	A	88	C												
55	A	89	C												
56	A	90	C												
57	A	91	C												
58	C	92	C												
59	C	93	C												
60	C	94	C												
61	C	95	C												
62	A	96	A												
63	A	97	A												
64	A	98	A												
65	A	99	A												
66	C	100	A												
67	C	101	C												
68	C	102	C												
69	C	103	C												
70	A	104	C												
71	A	105	C												
72	C	106	A												
73	C	107	A												
74	C	108	A												
75	A	109	C												
76	A	110	A												
77	C	111	A												
78	A	112	A												
79	C	113	A												
80	A	114	C												

SIZE	CODE IDENT. NO.	
A	99974	1023055
SCALE NONE	REV LTR C	SHEET 2 OF 120

MIL 1377A3 8-65

NOTE NUMBER	GENERAL NOTES DESCRIPTION
1	NOT APPLICABLE
3	INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327.
4	MARK LEAD IDENTIFICATION PER ND1002019.
5	MARK LEAD IDENTIFICATION ON SINGLE CONDUCTORS PER ND1002019 OMITTING ALL SUFFIX LETTERS EXCEPT A AND B. SUFFIX LETTERS ON SINGLE LEAD INDICATE TWISTING ONLY.
6	DELETED
7	SPIRALLING OF THE MARKING IS ALLOWED.
8	MARK SLEEVING OF MULTI-LEADS WITH THE LEADS NUMBER .12 INCH HIGH, COLOR BLACK, PER ND1002019
13	LENGTHS SPECIFIED ARE FOR LEADS BEFORE ATTACHING TO AN ACCESSORY.
14	LEAD LENGTHS ARE FOR MFG REFERENCE ONLY.
15	A LETTER WITH AN ASTERISK SUFFIX INDICATES A LOWER CASE LETTER.
17	LACE HARNESS PER ND1002032 USING ITEM 51.
18	LEADS LISTED WITH AN A OR B IN THE DETAIL COLUMN ARE TO BE ASSEMBLED PER DETAIL A OR B AS SHOWN ON THE CONFIGURATION DRAWING (1014606 REF).
19	SOLDER PER MIL-S-6872 (ES2505-1) USING ITEMS 50 AND 58, OR 44.

SIZE A
CODE IDENT NO. 80230
1023055
SCALE-NONE REV LTR C
SHEET 3 OF 120

NOTE NUMBER	GENERAL NOTES DESCRIPTION
20	THE SUFFIX LETTER OF A LEAD IDENTIFICATION NUMBER INDICATES LEAD SHIELDING, COLOR, MARKING OR TWISTING A - FROM END SHIELD B - TO END SHIELD G - GREEN K - BLACK L - BLUE N - BROWN R - RED W - WHITE Y - YELLOW
21	ASSEMBLE HARNESS AS SHOWN PER CONFIGURATION DRAWING (1014606 REF).
22	SERIALIZE PER ND1002023.
23	VENDOR ITEM - SEE SPECIFICATION CONTROL DRAWING
24	VENDOR ITEM - SEE SOURCE CONTROL DRAWING.

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NOTE NUMBER — GENERAL NOTES — DESCRIPTION

TOLERANCE CHART, UNLESS OTHERWISE SPECIFIED ---

APPLICABLE LENGTH FOR STRIP WIRE, STRIP JACKET, CUT WIRE OR CUT SHIELD.	TOLERANCE STRIP WIRE	 JACKET	 CUT WIRE	 SHIELD
UNDER 1 INCH	+.03-.00	+.06-.06	+.06-.06	+.06-.06
1 INCH TO 6 INCHES	+.06-.00	+.25-.25	+.25-.25	+.25-.25
6 INCHES TO 6 FEET		+.50-.50	+.50-.50	+.50-.50

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SCALE-NONE REV LTR A
SHEET 5 OF 120

LIST OF MATERIALS

SEE NOTE NUMBER	ITEM	QTY	PART NO.	DESCRIPTION
	1	1	1023055-001	WIRE PER 1010789-011 YEL JKT 24AWG YEL 13 FEET 0.0 INCHES TOTAL LENGTH
	2	1	1023055-002	WIRE PER 1010789-012 YEL JKT 24AWG YEL, RED 376 FEET 11.0 INCHES TOTAL LENGTH
	3	1	1023055-003	WIRE PER 1010789-013 YEL JKT 24AWG YEL, RED, GREEN 30 FEET 4.0 INCHES TOTAL LENGTH
	4	1	1023055-004	WIRE PER 1010789-001 24AWG YELLOW 878 FEET 11.0 INCHES TOTAL LENGTH
	5	1	1023055-005	WIRE PER 1010789-006 22AWG YELLOW 138 FEET 9.0 INCHES TOTAL LENGTH
	6	1	1023055-006	WIRE PER 1010707-1 (3 COND TWISTED SHIELDED) 26 FEET 6.0 INCHES TOTAL LENGTH
23	7	3	1010824- 1	CONNECTOR RECP ELECTRICAL
23	8	5	1010824- 2	CONNECTOR RECP ELECTRICAL
23	9	1	1010822- 1	CONNECTOR RECP ELECTRICAL
23	10	2	1010822- 3	CONNECTOR RECP ELECTRICAL
23	11	1	1010816-144	CONNECTOR RECP ELECTRICAL
23	12	1	1010816-244	CONNECTOR RECP ELECTRICAL
23	13	1	1010348- 1	CONNECTOR PLUG ELECTRICAL
23	14	1	1010348- 2	CONNECTOR PLUG ELECTRICAL
23	17	1	1010674- 1	CONNECTOR PLUG ELECTRICAL

SIZE A
CODE IDENT NO.
1023055
SCALE-NONE REV LTR B
SHEET 6 OF 120

SEE NOTE LIST OF MATERIALS

NUMBER	ITEM	QTY	PART NO.	DESCRIPTION
23	18	1	1010674- 2	CONNECTOR PLUG ELECTRICAL
23	19	1	1010674- 3	CONNECTOR PLUG ELECTRICAL
23	20	1	1010674- 4	CONNECTOR PLUG ELECTRICAL
23	27	16	1010402- 1	SLEEVE, SOLDER
23	28	137	1010402- 2	SLEEVE, SOLDER
23	31	249	1010490-110	INSULATION-SLEEVING, ELECTRICAL, HEAT SHRINKABLE (WHITE)
23	32	316	1010490-112	INSULATION-SLEEVING, ELECTRICAL, HEAT SHRINKABLE (WHITE)
23	38	1	1010490-975	INSULATION-SLEEVING, ELECTRICAL, HEAT SHRINKABLE (WHITE) 36 INCHES TOTAL LENGTH
23	39	1	101C490-979	INSULATION-SLEEVING, ELECTRICAL, HEAT SHRINKABLE (WHITE) 36 INCHES TOTAL LENGTH
23	40	2	1010490-216	INSULATION-SLEEVING, ELECTRICAL, HEAT SHRINKABLE (WHITE)
23	41	2	1010490-222	INSULATION-SLEEVING, ELECTRICAL, HEAT SHRINKABLE (WHITE)
	42	1	1023055-007	WIRE, BRAID PER QQ-B-575 (COPPER, TIN-COATED, TUBLAR) SIZE 3/8 ID, 36 GAUGE, 36 INCHES TOTAL LENGTH
	43	1	1023055-008	WIRE, BRAID PER QQ-B-575 (COPPER, TIN-COATED, TUBLAR) SIZE 1/2 ID, 36 GAUGE, 36 INCHES TOTAL LENGTH

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SCALE-NONE REV LTR ✓ A SHEET 7 OF 120

SEE NOTE LIST OF MATERIALS

NUMBER	ITEM	QTY	PART NO.	DESCRIPTION
23	45	1	1000243- 34	FERRULE, INNER ELECTRICAL CONDUCTOR
23	46	1	1000243- 26	FERRULE, INNER ELECTRICAL CONDUCTOR
23	47	1	1000242- 30	FERRULE, OUTER ELECTRICAL CONDUCTOR
23	49	1638	1010738- 6	CONTACT, SOCKET
24	51	AR	1012507-004	TAPE, LACING AND TYING
	52	REF		CONTACT SOCKETS SUPPLIED WITH 1010348
	53	REF		CONTACT SOCKETS SUPPLIED WITH 1010671
	54	REF		CONTACT SOCKETS SUPPLIED WITH 1021714
23	59	1	1000242- 24	FERRULE, OUTER ELECTRICAL CONDUCTOR
23	60	1	1000243- 30	FERRULE, INNER ELECTRICAL CONDUCTOR
23	61	1	1000242- 27	FERRULE, OUTER ELECTRICAL CONDUCTOR
23	62	1	1000243- 36	FERRULE, INNER ELECTRICAL CONDUCTOR
23	63	1	1000242- 33	FERRULE, OUTER ELECTRICAL CONDUCTOR
23	64	263	1010743- 1	WRAPOST RECEPTACLE
23	65	136	101C743- 2	WRAPOST RECEPTACLE
23	66	84	101C743- 3	WRAPOST RECEPTACLE
23	67	1	1010734- 16	GROMMET, CONNECTOR STRAIN RELIEF
23	68	1	1010734- 18	GROMMET, CONNECTOR STRAIN RELIEF

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SEE NOTE LIST OF MATERIALS

NUMBER	ITEM	QTY	PART NO.	DESCRIPTION
23	69	12	1010770- 2	CONTACT SOCKET
23	70	1	1010809-001	CONNECTOR, PLUG ELECTRICAL
	71	1	1021714-001	CONNECTCR, PLUG ELECTRICAL
	72	1	1021714-002	CONNECTOR, PLUG ELECTRICAL
	73	1	1023055-009	WIRE PER 1010789-008 22AWG YELLOW, RED 10 FEET 3.0 INCHES TOTAL LENGTH
	74	1	1023055-010	WIRE PER 1010789-009 22AWG YEL, RED, GREEN 54.0 INCHES TOTAL LENGTH
	75	1	1023055-011	WIRE PER 1010789-010 22AWG YEL, RED, GREEN BROWN 16 FT 1.0 IN. TOTAL LENGTH
	76	1	1023055-012	WIRE PER 1010789-002 24AWG BLACK 119 FEET 0.0 INCHES TOTAL LENGTH
	77	1	1023055-013	WIRE PER 1010789-003 24AWG YEL, RED 420 FEET 0.0 INCHES TOTAL LENGTH
	78	1	1023055-014	WIRE PER 1010789-004 24AWG YEL, RED, GREEN 86 FEET 4.0 INCHES TOTAL LENGTH
	79	1	1023055-015	WIRE PER 1010789-005 24AWG YELLOW, RED GREEN, BROWN 15 FT 5.0 IN. TOTAL LENGTH
23	80	1	1010824- 5	CONNECTOR RECP ELECTRICAL
	81	1	1015902- 3	LUG TERMINAL
23	82	300	1010490-118	INSULATION SLEEVING ELECTRICAL HEAT SHRINKABLE WHITE

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CODE IDENT NO.
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SCALE-NONE REV LTR C SHEET 9 OF 120

	LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM.JKT AREA NO.	STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A	1	77	39.00									32 32	
A	1R			56P1-80 56TB2-A2					.10 .20	NO NO		49	
A	1Y			56P1-95 56TB2-A1					.10 .20	NO NO		49	
A	2	4	48.00	56P1-65 56TB3-L1					.10 .20	NO NO		49, 82	
A	3	4	38.00	56P1-38 56TB1-K4					.10 .20	NO NO		49, 82	
A	4	4	38.00	56P1-48 56TB1-K3					.10 .20	NO NO		49, 82	
A	5	4	38.00	56P1-13 56TB1-K5					.10 .20	NO NO		49, 82	
A	6	4	38.00	56P1-27 56TB1-K8					.10 .20	NO NO		49, 82	
A	7	4	38.00	56P1-58 56TB1-K6					.10 .20	NO NO		49, 82	
A	8	4	39.00	56P1-12 56TB2-B2					.10 .20	NO NO		49, 82 64	
A	9	4	39.00	56P1-57 56TB2-R4					.10 .20	NO NO		49, 82 64	
A	10	4	39.00	56P1-5 56TB2-C1					.10 .20	NO NO		49, 82 64	

SIZE A
CODE IDENT NO. 80230
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SCALE-NONE REV LTR C SHEET 10 OF 120

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 11	4	39.00	56P1-69 56TB2-B1					.10 .20	NO NO		49, 82 64	
A 12	4	48.00	56P1-24 56TB3-F4					.10 .20	NO NO		49, 82	
A 13	2	39.00			3.00 2.50	2.75 2.25					31 31, 28	
A 13B	76	12.00	56TB2-D3 SHLD A13					.20 .20	NO NO			
A 13R			56E61 56TB2-F3					.20 .20	NO NO		28	
A 13Y			56P1-68 56TB2-D2				2.00	.10 .20	NO NO		49	
A 14	2	51.00			3.00 1.00	2.75 .75					31 31, 28	
A 14B	76	12.00	56E44 SHLD A14					.20 .20	NO NO		28	
A 14R			56E61 56J21-155					.20 .10	NO NO		 49	
A 14Y			56P1-59 56J21-154				2.00	.10 .10	NO NO		49 49	
A 15	2	51.00			3.00 1.00	2.75 .75					31 31, 28	
A 15B	76	12.00	56E44 SHLD A15					.20 .20	NO NO			

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 15R			56E61 56J21-223					.20 .10	NO NO		 49	
A 15Y			56P1-49 56J21-222				2.00	.10 .10	NO NO		49 49	
A 16	2	51.00			3.00 1.00	2.75 .75					31 31, 28	
A 16B	76	12.00	56E44 SHLD A16					.20 .20	NO NO			
A 16R			56E61 56J21-227					.20 .10	NO NO		 49	
A 16Y			56P1-39 56J21-226				2.00	.10 .10	NO NO		49 49	
A 18	4	38.00	56P1-91 56TB1-K1					.10 .20	NO NO		49, 82	
A 19	77	39.00									32 32	
A 19R			56P1-11 56TB2-G4					.10 .20	NO NO		49	
A 19Y			56P1-10 56TB2-H4					.10 .20	NO NO		49	
A 20	4	39.00	56P1-78 56TB2-M4					.10 .20	NO NO		49, 82	
A 21	4	48.00	56P1-7 56TB3-S21					.10 .20	NO NO		49, 82	

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 22	4	38.00	56P1-26 56TB1-U2					.10 .20	NO NO		49, 82	
A 23	2	39.00			1.00 2.50	.75 2.25					31 31, 28	
A 23B	76	12.00	56TB2-S2 SHLD A23					.20 .20	NO NO			
A 23R			56P1-96 56TB2-N2					.10 .20	NO NO		49	
A 23Y			56P1-97 56TB2-R2					.10 .20	NO NO		49	
A 24	2	39.00			1.00 2.50	.75 2.25					31 31, 28	
A 24B	76	12.00	56TB2-F2 SHLD A24					.20 .20	NO NO			
A 24R			56P1-70 56TB2-H2					.10 .20	NO NO		49	
A 24Y			56P1-71 56TB2-G2					.10 .20	NO NO		49	
A 25	2	39.00			1.00 2.50	.75 2.25					31 31, 28	
A 25B	76	12.00	56TB2-F7 SHLD A25					.20 .20	NO NO			
A 25R			56P1-82 56TB2-H7					.10 .20	NO NO		49	

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 25Y			56P1-83 56TB2-G7					.10 .20	NO NO		49	
A 26	4	38.00	56P1-4 56TB1-D6					.10 .20	NO NO		49, 82 64	
A 27	2	39.00			3.00 1.00	2.75 .75					31 31, 28	
A 27B	76	12.00	56E44 SHLD A27					.20 .20	NO NO			
A 27R			56E61 56J21-225					.20 .10	NO NO		 49	
A 27Y			56P1-76 56J21-224				2.00	.10 .10	NO NO		49 49	
A 28	4	48.00	56P1-88 56TB3-F3					.10 .20	NO NO		49, 82	
A 29	4	48.00	56P1-89 56TB3-M21					.10 .20	NO NO		49, 82 64	
A 30	4	39.00	56P1-37 56TB2-C2					.10 .20	NO NO		49, 82	
A 31	4	48.00	56P1-45 56TB3-M2					.10 .20	NO NO		49, 82 64	
A 32	4	48.00	56P1-55 56TB3-L2					.10 .20	NO NO		49, 82 64	
A 33	4	48.00	56P1-84 56TB3-B20					.10 .20	NO NO		49, 82	

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 38	77	38.00									32 32	
A 38R	4		56J1-67 56TB2-H3					.10 .20	NO NO		49 64	
A 38Y	4		56J1-57 56TB2-G3					.10 .20	NO NO		49 64	
A 39	2	38.00			1.00 2.50	.75 2.25					31 31, 28	
A 39B	76	12.00	56TB2-F2 SHLD A39					.20 .20	NO NO			
A 39R			56J1-35 56TB2-H2					.10 .20	NO NO		49	
A 39Y			56J1-45 56TB2-G2					.10 .20	NO NO		49	
A 40	2	47.00			1.00 2.50	.75 2.25					31 31, 28	
A 40B	76	12.00	56TB3-H14 SHLD A40					.20 .20	NO NO			
A 40R			56J1-20 56TB3-F14					.10 .20	NO NO		49	
A 40Y			56J1-6 56TB3-F13					.10 .20	NO NO		49	
A 41	2	47.00			1.00 2.50	.75 2.25					31 31, 28	

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LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 41B	76	12.00	56TB3-H13 SHLD A41					.20 .20	NO NO			
A 41R			56J1-21 56TB3-D13					.10 .20	NO NO		49	
A 41Y			56J1-7 56TB3-D14					.10 .20	NO NO		49	
A 42	2	38.00			1.00 2.50	.75 2.25					31 31, 28	
A 42B	76	12.00	56TB2-G1 SHLD A42					.20 .20	NO NO		65	
A 42R			56J1-104 56TB2-H1					.10 .20	NO NO		49 64	
A 42Y			56J1-90 56TB2-G1					.10 .20	NO NO		49	
A 43	2	38.00			1.00 2.50	.75 2.25					31 31, 28	
A 43B	76	12.00	56TB2-V6 SHLD A43					.20 .20	NO NO			
A 43R			56J1-100 56TB2-W6					.10 .20	NO NO		49	
A 43Y			56J1-86 56TB2-W7					.10 .20	NO NO		49 64	
A 44	2	38.00			1.00 2.50	.75 2.25					31 31, 28	

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SCALE - NONE
REV LTR A
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LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 44B	76	12.00	56TB2-D8 SHLD A44					.20 .20	NO NO		65	
A 44R			56J1-101 56TB2-B8					.10 .20	NO NO		49	
A 44Y			56J1-87 56TB2-C8					.10 .20	NO NO		49 64	
A 45	3	38.00			1.00 2.50	.75 2.25					31 31, 28	
A 45B	76	12.00	56TB2-A5 SHLD A45					.20 .20	NO NO		65	
A 45G			56J1-108 56TB2-C5					.10 .20	NO NO		49 64	
A 45R			56J1-94 56TB2-A5					.10 .20	NO NO		49	
A 45Y			56J1-107 56TB2-B5					.10 .20	NO NO		49 64	
A 46	77	12.00									32 32	
A 46R			56J1-50 56E4					.10 .20	NO NO		49 27	
A 46Y			56J1-60 56E3					.10 .20	NO NO		49 27	
A 48	4	12.00	56J1-16 56E6					.10 .20	NO NO		49, 82 27	

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CODE IDENT NO.
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SCALE-NONE
REV LTR C
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LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 50	4	12.00	56J1-15 56E8					.10 .20	NO NO		49, 82 27	
A 51	3	38.00			1.00 2.50	.75 2.25					31 31, 28	
A 51B	76	12.00	56TB2-T7 SHLD A51					.20 .20	NO NO		65	
A 51G			56J1-105 56TB2-T6					.10 .20	NO NO		49 64	
A 51R			56J1-106 56TB2-U6					.10 .20	NO NO		49 64	
A 51Y			56J1-92 56TB2-T7					.10 .20	NO NO		49	
A 52	78	38.00									32 32	
A 52G			56J1-31 56TB2-L5					.10 .20	NO NO		49 64	
A 52R			56J1-43 56TB2-K4					.10 .20	NO NO		49	
A 52Y			56J1-32 56TB2-L6					.10 .20	NO NO		49 64	
A 53	77	12.00									32 32	
A 53R			56J1-28 56E9					.10 .20	NO NO		49 28	

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SCALE-NONE
REV LTR C
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SERIES 0 SPARE 1023055 C

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 53Y			56J1-29 56E10					.10 .20	NO NO		49 28	
A 54	4	12.00	56J1-41 56E12					.10 .20	NO NO		49, 82 28	
A 55	4	38.00	56J1-34 56TB2-W1					.10 .20	NO NO		49, 82 64	
A 56	4	38.00	56J1-30 56TB2-N5					.10 .20	NO NO		49, 82 64	
A 62	77	37.00									32 32	
A 62R			56J2-67 56TB2-H6					.10 .20	NO NO		49 64	
A 62Y			56J2-57 56TB2-G6					.10 .20	NO NO		49 64	
A 63	2	37.00			1.00 2.50	.75 2.25					31 31, 28	
A 63B	76	12.00	56TB2-F7 SHLD A63					.20 .20	NO NO			
A 63R			56J2-35 56TB2-H7					.10 .20	NO NO		49	
A 63Y			56J2-45 56TB2-G7					.10 .20	NO NO		49	
A 64	2	46.00			1.00 2.50	.75 2.25					31 31, 28	

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SCALE-NONE | REV LTR C | SHEET 19 OF 120

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SERIES 0 SPARE 1023055

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 64B	76	12.00	56E48 SHLD A64					.20 .20	NO NO		27	
A 64R			56J2-20 56TB3-N20					.10 .20	NO NO		49	
A 64Y			56J2-6 56TB3-N21					.10 .20	NO NO		49	
A 65	2	46.00			1.00 2.50	.75 2.25					31 31, 28	
A 65B	76	12.00	56TB3-H12 SHLD A65					.20 .20	NO NO			
A 65R			56J2-21 56TB3-C13					.10 .20	NO NO		49	
A 65Y			56J2-7 56TB3-C14					.10 .20	NO NO		49	
A 66	2	37.00			1.00 2.50	.75 2.25					31 31, 28	
A 66B	76	12.00	56TB2-G8 SHLD A66					.20 .20	NO NO		65	
A 66R			56J2-104 56TB2-H8					.10 .20	NO NO		49 64	
A 66Y			56J2-90 56TB2-G8					.10 .20	NO NO		49	
A 67	2	37.00			1.00 2.50	.75 2.25					31 31, 28	

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SCALE-NONE | REV LTR ~~/~~ A | SHEET 20 OF 120

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SERIES 0 SPARE 1023055

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 67B	76	12.00	56TB2-V5 SHLD A67					.20 .20	NO NO			
A 67R			56J2-100 56TB2-U5					.10 .20	NO NO		49	
A 67Y			56J2-86 56TB2-U4					.10 .20	NO NO		49 64	
A 68	2	37.00			1.00 2.50	.75 2.25					31 31, 28	
A 68B	76	12.00	56TB2-D7 SHLD A68					.20 .20	NO NO			
A 68R			56J2-101 56TB2-B7					.10 .20	NO NO		49	
A 68Y			56J2-87 56TB2-C7					.10 .20	NO NO		49 64	
A 69	3	37.00			1.00 2.50	.75 2.25					31 31, 28	
A 69B	76	12.00	56TB2-C6 SHLD A69					.20 .20	NO NO		65	
A 69G			56J2-108 56TB2-A6					.10 .20	NO NO		49 64	
A 69R			56J2-94 56TB2-C6					.10 .20	NO NO		49	
A 69Y			56J2-107 56TB2-B6					.10 .20	NO NO		49 64	

MANNED SPACECRAFT CENTER HOUSTON, TEXAS | SIZE A | 1023055

SCALE-NONE | REV LTR ~~/~~ A | SHEET 21 OF 120

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SERIES 0 SPARE 1023055 C

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 70	77	12.00									32 32	
A 70R			56J2-50 56E4					.10 .20	NO NO		49	
A 70Y			56J2-60 56E3					.10 .20	NO NO		49	
A 72	4	12.00	56J2-16 56E6					.10 .20	NO NO		49, 82	
A 74	4	12.00	56J2-15 56E8					.10 .20	NO NO		49, 82	
A 75	3	37.00			1.00 2.50	.75 2.25					31 31, 28	
A 75B	76	12.00	56TB2-X6 SHLD A75					.20 .20	NO NO		65	
A 75G			56J2-105 56TB2-X5					.10 .20	NO NO		49 64	
A 75R			56J2-106 56TB2-W5					.10 .20	NO NO		49 64	
A 75Y			56J2-92 56TB2-X6					.10 .20	NO NO		49	
A 76	78	37.00									32 32	
A 76G			56J2-31 56TB2-L3					.10 .20	NO NO		49 64	

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SCALE-NONE | REV LTR C | SHEET 22 OF 120

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LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 76R			56J2-43 56TB2-K4					.10 .20	NO NO		49	
A 76Y			56J2-32 56TB2-K3					.10 .20	NO NO		49 64	
A 77	77	12.00									32 32	
A 77R			56J2-28 56E9					.10 .20	NO NO		49	
A 77Y			56J2-29 56E10					.10 .20	NO NO		49	
A 78	4	12.00	56J2-41 56E12					.10 .20	NO NO		49, 82	
A 79	4	37.00	56J2-34 56TB2-X1					.10 .20	NO NO		49, 82 64	
A 80	4	37.00	56J2-30 56TB2-R5					.10 .20	NO NO		49, 82 64	
A 84	77	12.00									32 32	
A 84R			56J3-1 56E1					.10 .20	NO NO		49	
A 84Y			56J3-14 56E2					.10 .20	NO NO		49	
A 85	77	38.00									32 32	

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A		1023055
SCALE-NONE	REV LTR C	SHEET 23 OF 120

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 85R			56J3-67 56TB2-N1					.10 .20	NO NO		49 64	
A 85Y			56J3-57 56TB2-R1					.10 .20	NO NO		49 64	
A 86	2	38.00			1.00 2.50	.75 2.25					31 31, 28	
A 86B	76	12.00	56TB2-S2 SHLD A86					.20 .20	NO NO			
A 86R			56J3-35 56TB2-N2					.10 .20	NO NO		49	
A 86Y			56J3-45 56TB2-R2					.10 .20	NO NO		49	
A 87	2	38.00			1.00 2.50	.75 2.25					31 31, 28	
A 87B	76	12.00	56TB2-M8 SHLD A87					.20 .20	NO NO			
A 87R			56J3-20 56TB2-R8					.10 .20	NO NO		49 64	
A 87Y			56J3-6 56TB2-N7					.10 .20	NO NO		49	
A 88	2	38.00			1.00 2.50	.75 2.25					31 31, 28	
A 88B	76	12.00	56TB2-V8 SHLD A88					.20 .20	NO NO			

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	A	1023055
SCALE-NONE	REV LTR / A	SHEET 24 OF 120

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 88R			56J3-21 56TB2-T8					.10 .20	NO NO		49 64	
A 88Y			56J3-7 56TB2-U8					.10 .20	NO NO		49	
A 89	2	38.00			1.00 2.50	.75 2.25					31 31, 28	
A 89B	76	12.00	56TB2-S3 SHLD A89					.20 .20	NO NO			
A 89R			56J3-104 56TB2-N3					.10 .20	NO NO		49	
A 89Y			56J3-90 56TB2-R3					.10 .20	NO NO		49	
A 90	2	38.00			1.00 2.50	.75 2.25					31 31, 28	
A 90B	76	12.00	56TB2-V4 SHLD A90					.20 .20	NO NO		65	
A 90R			56J3-100 56TB2-W4					.10 .20	NO NO		49	
A 90Y			56J3-86 56TB2-X4					.10 .20	NO NO		49 64	
A 91	2	38.00			1.00 2.50	.75 2.25					31 31, 28	
A 91B	76	12.00	56TB2-V2 SHLD A91					.20 .20	NO NO			

MANNED SPACECRAFT CENTER HOUSTON, TEXAS	SIZE	
	A	1023055
SCALE-NONE	REV LTR / A	SHEET 25 OF 120

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 91R			56J3-101 56TB2-W2					.10 .20	NO NO		49	
A 91Y			56J3-87 56TB2-X2					.10 .20	NO NO		49 64	
A 92	3	38.00			1.00 2.50	.75 2.25					31 31, 28	
A 92B	76	12.00	56TB2-A4 SHLD A92					.20 .20	NO NO		65	
A 92G			56J3-108 56TB2-C4					.10 .20	NO NO		49 64	
A 92R			56J3-94 56TB2-A4					.10 .20	NO NO		49	
A 92Y			56J3-107 56TB2-B4					.10 .20	NO NO		49 64	
A 93	77	12.00									32 32	
A 93R			56J3-50 56E4					.10 .20	NO NO		49	
A 93Y			56J3-60 56E3					.10 .20	NO NO		49	
A 96	3	38.00			1.00 2.50	.75 2.25					31 31, 28	
A 96B	76	12.00	56TB2-R7 SHLD A96					.20 .20	NO NO		65	

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	A	1023055
SCALE-NONE	REV LTR / A	SHEET 26 OF 120

SERIES 0 SPARE 1023055 C

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM.JKT AREA NO.	STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 96G			56J3-105 56TB2-R6					.10 .20	NO NO		49 64	
A 96R			56J3-106 56TB2-N6					.10 .20	NO NO		49 64	
A 96Y			56J3-92 56TB2-R7					.10 .20	NO NO		49	
A 97	78	38.00									32 32	
A 97G			56J3-31 56TB2-K6					.10 .20	NO NO		49 64	
A 97R			56J3-43 56TB2-K4					.10 .20	NO NO		49 66	
A 97Y			56J3-32 56TB2-K5					.10 .20	NO NO		49 64	
A 98	77	12.00									32 32	
A 98R			56J3-28 56E9					.10 .20	NO NO		49	
A 98Y	4	12.00	56J3-29 56E10					.10 .20	NO NO		49	
A 99	4	12.00	56J3-41 56E12					.10 .20	NO NO		49, 82	
A 100	4	38.00	56J3-34 56TB2-S1					.10 .20	NO NO		49, 82 64	

SIZE	CODE IDENT NO.	
A		1023055
SCALE-NONE	REV LTR C	SHEET 27 OF 120

MIL 2084 9-65

SERIES 0 SPARE 1023055 C

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM.JKT AREA NO.	STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 101	4	38.00	56J3-89 56TB2-T1					.10 .20	NO NO		49, 82 64	
A 102	4	38.00	56J3-30 56TB2-K8					.10 .20	NO NO		49, 82 64	
A 104	77	12.00									32 32	
A 104R	4	12.00	56J4-1 56E14					.10 .20	NO NO		49 28	
A 104Y	4	12.00	56J4-14 56E13					.10 .20	NO NO		49 28	
A 107	2	48.00			1.00 2.50	.75 2.25					31 31, 28	
A 107B	76	12.00	56TB3-H9 SHLD A107					.20 .20	NO NO			
A 107R			56J4-57 56TB3-K11					.10 .20	NO NO		49	
A 107Y			56J4-67 56TB3-K10					.10 .20	NO NO		49	
A 108	2	48.00			1.00 2.50	.75 2.25					31 31, 28	
A 108B	76	12.00	56TB3-N15 SHLD A108					.20 .20	NO NO		64	
A 108R			56J4-66 56TB3-N13					.10 .20	NO NO		49	

SIZE	CODE IDENT NO.	
A		1023055
SCALE-NONE	REV LTR C	SHEET 28 OF 120

MIL 2084 9-65

SERIES 0 SPARE 1023055

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM.JKT AREA NO.	STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 108Y			56J4-56 56TB3-N14					.10 .20	NO NO		49	
A 109	78	48.00									32 32	
A 109G			56J4-34 56TB3-T12					.10 .20	NO NO		49 64	
A 109R			56J4-45 56TB3-R12					.10 .20	NO NO		49 64	
A 109Y			56J4-35 56TB3-S12					.10 .20	NO NO		49 64	
A 110	2	48.00			1.00 2.50	.75 2.25					31 31, 28	
A 110B	76	12.00	56TB3-K9 SHLD A110					.20 .20	NO NO			
A 110R			56J4-6 56TB3-K7					.10 .20	NO NO		49 64	
A 110Y			56J4-20 56TB3-K8					.10 .20	NO NO		49 64	
A 111	2	48.00			1.00 2.50	.75 2.25					31 31, 28	
A 111B	76	12.00	56TB3-G15 SHLD A111					.20 .20	NO NO		64	
A 111R			56J4-7 56TB3-G13					.10 .20	NO NO		49 64	

MANNED SPACECRAFT CENTER HOUSTON, TEXAS	SIZE	
	A	1023055
SCALE-NONE	REV LTR A	SHEET 29 OF 120

MIL 2084 4-63

SERIES 0 SPARE 1023055 C

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM.JKT AREA NO.	STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 111Y			56J4-21 56TB3-G14					.10 .20	NO NO		49 64	
A 112	2	48.00			1.00 2.50	.75 2.25					31 31, 28	
A 112B	76	12.00	56TB3-H9 SHLD A112					.20 .20	NO NO			
A 112R			56J4-104 56TB3-H10					.10 .20	NO NO		49 64	
A 112Y			56J4-90 56TB3-H11					.10 .20	NO NO		49 64	
A 113	4	48.00	56J4-89 56TB3-N18					.10 .20	NO NO		49, 82 64	
A 114	2	48.00			1.00 2.50	.75 2.25					31 31, 28	
A 114B	76	12.00	56TB3-N9 SHLD A114					.20 .20	NO NO			
A 114R			56J4-100 56TB3-N7					.10 .20	NO NO		49 64	
A 114Y			56J4-86 56TB3-N8					.10 .20	NO NO		49 64	
A 115	2	48.00			1.00 2.50	.75 2.25					31 31, 28	
A 115B	76	12.00	56TB3-N9 SHLD A115					.20 .20	NO NO		65	

SIZE	CODE IDENT NO.	
A		1023055
SCALE-NONE	REV LTR C	SHEET 30 OF 120

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 115R			56J4-101 56TB3-N11					.10 .20	NO NO		49 64	
A 115Y			56J4-87 56TB3-N10					.10 .20	NO NO		49 64	
A 116	3	48.00			1.00 2.50	.75 2.25					31 31, 28	
A 116B	76	12.00	56TB3-S5 SHLD A116					.20 .20	NO NO		65	
A 116G			56J4-108 56TB3-S4					.10 .20	NO NO		49 64	
A 116R			56J4-94 56TB3-S5					.10 .20	NO NO		49	
A 116Y			56J4-107 56TB3-S6					.10 .20	NO NO		49 64	
A 117	77	12.00									32 32	
A 117R			56J4-50 56E17					.10 .20	NO NO		49 27	
A 117Y			56J4-60 56E16					.10 .20	NO NO		49 27	
A 121	2	48.00			1.00 2.50	.75 2.25					31 31, 28	
A 121B	76	12.00	56TB3-L9 SHLD A121					.20 .20	NO NO			

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS
SIZE A
1023055
SCALE-NONE
REV LTR A
SHEET 31 OF 120

MIL 2084 4-63

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 121R			56J4-106 56TB3-L7					.10 .20	NO NO		49 64	
A 121Y			56J4-92 56TB3-L8					.10 .20	NO NO		49 64	
A 122	78	48.00									32 32	
A 122G			56J4-31 56TB3-D11					.10 .20	NO NO		49 64	
A 122R			56J4-43 56TB3-B17					.10 .18	NO NO		49 65	
A 122Y			56J4-32 56TB3-C11					.10 .20	NO NO		49 64	
A 123	77	12.00									32 32	
A 123R	4		56J4-28 56E9					.10 .20	NO NO		49	
A 123Y	4	12.00	56J4-29 56E10					.10 .20	NO NO		49	
A 124	4	12.00	56J4-41 56E12					.10 .20	NO NO		49, 82	
A 130	2	50.00			1.00 2.50	.75 2.25					31 31, 28	
A 130B	76	12.00	56TB3-G9 SHLD A130					.20 .20	NO NO			

SIZE A
CODE IDENT NO.
1023055
SCALE-NONE
REV LTR C
SHEET 32 OF 120

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 130R			56J5-8 56TB3-G10					.10 .20	NO NO		49	
A 130Y			56J5-22 56TB3-F10					.10 .20	NO NO		49	
A 131	2	50.00			1.00 2.50	.75 2.25					31 31, 28	
A 131B	76	12.00	56TB3-K15 SHLD A131					.20 .20	NO NO		66	
A 131R			56J5-9 56TB3-F16					.10 .20	NO NO		49	
A 131Y			56J5-10 56TB3-G16					.10 .20	NO NO		49	
A 132	2	50.00			3.00 2.50	2.75 2.25					31 31, 28	
A 132B	76	12.00	56TB3-L9 SHLD A132					.20 .20	NO NO		65	
A 132R			56J5-12 56TB3-L10				2.00	.10 .20	NO NO		49 64	
A 132Y			56E18 56TB3-L11					.20 .20	NO NO		27 64	
A 133	4	12.00	56J5-11 56E18					.10 .20	NO NO		49, 82	
A 134	2	50.00			1.00 2.50	.75 2.25					31 31, 28	

SIZE A
CODE IDENT NO.
1023055
SCALE-NONE
REV LTR C
SHEET 33 OF 120

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 134B	76	12.00	56TB3-R15 SHLD A134					.20 .20	NO NO			
A 134R			56J5-68 56TB3-R14					.10 .20	NO NO		49 64	
A 134Y			56J5-67 56TB3-R13					.10 .20	NO NO		49 64	
A 135	2	50.00			1.00 2.50	.75 2.25					31 31, 28	
A 135B	76	12.00	56TB3-H9 SHLD A135					.20 .20	NO NO		66	
A 135R			56J5-104 56TB3-H8					.10 .20	NO NO		49 64	
A 135Y			56J5-90 56TB3-H7					.10 .20	NO NO		49 64	
A 136	4	50.00	56J5-89 56TB3-N18					.10 .20	NO NO		49, 82 64	
A 137	2	50.00			1.00 2.50	.75 2.25					31 31, 28	
A 137B	76	12.00	56TB3-T9 SHLD A137					.20 .20	NO NO			
A 137R			56J5-100 56TB3-T11					.10 .20	NO NO		49 64	
A 137Y			56J5-86 56TB3-T10					.10 .20	NO NO		49 64	

SIZE A
CODE IDENT NO.
1023055
SCALE-NONE
REV LTR C
SHEET 34 OF 120

MIL 2084 9-65

SERIES 0 SPARE 1023055

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 138	2	50.00			1.00 2.50	.75 2.25					31 31, 28	
A 138B	76	12.00	56TB3-S9 SHLD A138					.20 .20	NO NO			
A 138R			56J5-101 56TB3-S11					.10 .20	NO NO		49 64	
A 138Y			56J5-87 56TB3-S10					.10 .20	NO NO		49 64	
A 139	3	50.00			1.00 2.50	.75 2.25					31 31, 28	
A 139B	76	12.00	56TB3-T5 SHLD A139					.20 .20	NO NO		65	
A 139G			56J5-108 56TB3-T6					.10 .20	NO NO		49 64	
A 139R			56J5-94 56TB3-T5					.10 .20	NO NO		49	
A 139Y			56J5-107 56TB3-T4					.10 .20	NO NO		49 64	
A 144	2	50.00			1.00 2.50	.75 2.25					31 31, 28	
A 144B	76	12.00	56TB3-M9 SHLD A144					.20 .20	NO NO			
A 144R			56J5-106 56TB3-M8					.10 .20	NO NO		49 64	

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS
SIZE A
1023055
SCALE-NONE | REV LTR / A | SHEET 35 OF 120

SERIES 0 SPARE 1023055 C

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 144Y			56J5-92 56TB3-M7					.10 .20	NO NO		49 64	
A 145	78	50.00									32 32	
A 145G			56J5-31 56TB3-D12					.10 .20	NO NO		49 64	
A 145R			56J5-43 56TB3-B16					.10 .18	NO NO		49 65	
A 145Y			56J5-32 56TB3-C12					.10 .20	NO NO		49 64	
A 146	77	12.00									32 32	
A 146R			56J5-28 56E9					.10 .20	NO NO		49	
A 146Y			56J5-29 56E10					.10 .20	NO NO		49	
A 147	4	12.00	56J5-41 56E12					.10 .20	NO NO		49, 82	
A 148	77	50.00									32 32	
A 148R			56J5-56 56TB3-L12					.10 .20	NO NO		49 64	
A 148Y			56J5-66 56TB3-K12					.10 .20	NO NO		49 64	

SIZE A
CODE IDENT NO.
1023055
SCALE-NONE | REV LTR C | SHEET 36 OF 120

SERIES 0 SPARE 1023055 C

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 149	4	12.00	56J5-25 56E18					.10 .20	NO NO		49, 82	
A 150	77	80.00									32 32	
A 150R			56J6-1 56P1-1					.10 .10	NO NC		49 49	
A 150Y			56J6-2 56P1-2					.10 .10	NO NO		49 49	
A 151	77	80.00									32 32	
A 151R			56J6-14 56P1-14					.10 .10	NO NO		49 49	
A 151Y	4	80.00	56J6-15 56P1-15					.10 .10	NO NO		49 49	
A 152	77	80.00									32 32	
A 152R			56J6-29 56P1-29					.10 .10	NO NO		49 49	
A 152Y			56J6-28 56P1-28					.10 .10	NO NO		49 49	
A 153	77	51.00									32 32	
A 153R			56J6-108 56TB1-S1					.10 .20	NO NO		49	

SIZE A
CODE IDENT NO.
1023055
SCALE-NONE | REV LTR C | SHEET 37 OF 120

SERIES 0 SPARE 1023055 C

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 153Y			56J6-107 56TB1-S2					.10 .20	NO NO		49	
A 154	4	51.00	56J6-12 56TB1-K7					.10 .20	NO NO		49, 82	
A 155	2	56.00			3.00 2.50	2.75 2.25					31 31, 28	
A 155B	76	12.00	56TB2-D3 SHLD A155					.20 .20	NO NO		65	
A 155R			56E55 56TB2-F3					.20 .20	NO NO		27 65	
A 155Y			56J6-68 56TB2-D2				2.00	.10 .20	NO NO		49 65	
A 156	2	68.00			3.00 1.00	2.75 .75					31 31, 28	
A 156B	76	12.00	56E44 SHLD A156					.20 .20	NO NO			
A 156R			56E55 56J21-229					.20 .10	NO NO		 49	
A 156Y			56J6-69 56J21-228				2.00	.10 .10	NO NO		49 49	
A 157	4	80.00	56J6-18 56P1-18					.10 .10	NO NO		49, 82 49	
A 158	4	51.00	56J6-81 56TB1-F8					.10 .20	NO NO		49, 82	

SIZE A
CODE IDENT NO.
1023055
SCALE-NONE | REV LTR C | SHEET 38 OF 120

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 159	4	56.00	56J6-37 56TB2-C2					.10 .20	NO NO		49, 82 65	
A 160	4	80.00	56J6-9 56P1-9					.10 .10	NO NO		49, 82 49, 82	
A 161	4	80.00	56J6-6 56P1-6					.10 .10	NO NO		49, 82 49, 82	
A 162	4	80.00	56J6-34 56P1-34					.10 .10	NO NO		49, 82 49, 82	
A 163	4	80.00	56J6-35 56P1-35					.10 .10	NO NO		49, 82 49, 82	
A 164	4	80.00	56J6-36 56P1-36					.10 .10	NO NO		49, 82 49, 82	
A 165	4	80.00	56J6-23 56P1-23					.10 .10	NO NO		49, 82 49, 82	
A 166	4	66.00	56J6-24 56TB3-F4					.10 .20	NO NO		49, 82 65, 82	
A 167	4	80.00	56J6-25 56P1-25					.10 .10	NO NO		49, 82 49, 82	
A 168	4	80.00	56J6-93 56P1-93					.10 .10	NO NO		49, 82 49, 82	
A 169	4	56.00	56J6-78 56TB2-L4					.10 .20	NO NO		49, 82 82	
A 170	4	80.00	56J6-56 56P1-56					.10 .10	NO NO		49, 82 49, 82	

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 171	4	80.00	56J6-104 56P1-104					.10 .10	NO NO		49, 82 49, 82	
A 172	4	80.00	56J6-92 56P1-92					.10 .10	NO NO		49, 82 49, 82	
A 173	4	80.00	56J6-105 56P1-105					.10 .10	NO NO		49, 82 49, 82	
A 174	4	80.00	56J6-94 56P1-94					.10 .10	NO NO		49, 82 49, 82	
A 175	4	80.00	56J6-22 56P1-22					.10 .10	NO NO		49, 82 49, 82	
A 176	4	80.00	56J6-79 56P1-79					.10 .10	NO NO		49, 82 49, 82	
A 177	4	80.00	56J6-46 56P1-46					.10 .10	NO NO		49, 82 49, 82	
A 178	4	66.00	56J6-91 56TB3-B21					.10 .20	NO NO		49, 82	
A 179	4	50.00	56J8-67 56TB1-G1					.10 .20	NO NO		49, 82	
A 181	4	65.00	56J8-66 56TB3-H6					.10 .20	NO NO		49, 82	
A 182	77	65.00									32 32	
A 182R			56J8-68 56TB3-B13					.10 .20	NO NO		49	

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 182Y			56J8-81 56TB3-B12					.10 .20	NO NO		49	
A 183	4	55.00	56J8-106 56TB2-S6					.10 .20	NO NO		49, 82	
A 184	4	55.00	56J8-78 56TB2-S7					.10 .20	NO NO		49, 82	
A 185	4	55.00	56J8-93 56TB2-S4					.10 .20	NO NO		49, 82	
A 186	4	55.00	56J8-79 56TB2-S5					.10 .20	NO NO		49, 82	
A 187	4	50.00	56J8-51 56TB1-H8					.10 .20	NO NO		49, 82	
A 188	4	65.00	56J8-60 56TB3-M6					.10 .20	NO NO		49, 82	
A 189	4	12.00	56J8-61 56E20					.10 .20	NO NO		49, 82 28	
A 190	4	65.00	56J8-73 56TB3-B5					.10 .20	NO NO		49, 82	
A 191	4	12.00	56J8-84 56E20					.10 .20	NO NO		49, 82	
A 192	4	65.00	56J8-62 56TB3-D3					.10 .20	NO NO		49, 82	
A 193	4	50.00	56J8-42 56TB1-U2					.10 .20	NO NO		49, 82	

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 194	4	12.00	56J8-31 56E19					.10 .20	NO NO		49, 82 28	
A 195	4	12.00	56J8-70 56E19					.10 .20	NO NO		49, 82	
A 196	4	68.00	56J8-53 56J22-38					.10 .10	NO NO		49, 82 49	
A 197	4	68.00	56J8-54 56J22-37					.10 .10	NO NO		49, 82 49	
A 198	4	50.00	56J8-71 56TB1-H6					.10 .20	NO NO		49, 82	
A 199	4	65.00	56J8-95 56TB3-B14					.10 .20	NO NO		49, 82	
A 200	4	65.00	56J8-72 56TB3-B3					.10 .20	NO NO		49, 82	
A 201	4	12.00	56J8-83 56E20					.10 .20	NO NO		49, 82	
A 202	4	55.00	56J8-18 56TB2-S8					.10 .20	NO NO		49, 82	
A 203	4	65.00	56J8-41 56TB3-B4					.10 .20	NO NO		49, 82	
A 204	4	12.00	56J8-30 56E19					.10 .20	NO NO		49, 82	
A 205	4	12.00	56J8-28 56E19					.10 .20	NO NO		49, 82	

	LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A	206	4	68.00	56J8-43 56J22-72					.10 .10	NO NO		49, 82 49	
A	207	4	68.00	56J8-32 56J22-71					.10 .10	NO NO		49, 82 49	
A	208	4	12.00	56J8-17 56E19					.10 .20	NO NO		49, 82	
A	211	4	50.00	56J8-92 56TB1-S5					.10 .20	NO NO		49, 82	
A	212	4	12.00	56J8-52 56E19					.10 .20	NO NO		49, 82	
A	213	4	12.00	56J8-63 56E20					.10 .20	NO NO		49, 82	
A	214	4	55.00	56J8-82 56TB2-D6					.10 .20	NO NO		49, 82	
A	215	4	65.00	56J8-29 56TB3-B21					.10 .20	NO NO		49, 82 65	
A	216	77	37.00									32 32	
A	216R			56P2-A 56TB2-G4					.20 .20	NO NO		54	
A	216Y			56P2-B 56TB2-G5					.20 .20	NO NO		54 64	
A	217	2	37.00			1.50 2.50	1.25 2.25					31 31, 28	

SIZE A
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1023055
SCALE-NONE
REV LTR C
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	LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A	217B	76	12.00	56TB2-V3 SHLD A217					.20 .20	NO NO		64	
A	217R			56P2-C 56TB2-W4					.20 .20	NO NO		54 65	
A	217Y			56P2-D 56TB2-W3					.20 .20	NO NO		54 64	
A	218	2	33.00			1.50 2.50	1.25 2.25					31 31, 28	
A	218B	76	12.00	56TB2-V2 SHLD A218					.20 .20	NO NO		65	
A	218R			56P2-E 56TB2-X3					.20 .20	NO NO		54 64	
A	218Y			56P2-F 56TB2-W2					.20 .20	NO NO		54 65	
A	219	2	33.00			1.50 2.50	1.25 2.25					31 31, 28	
A	219B	76	12.00	56TB2-V5 SHLD A219					.20 .20	NO NO		65	
A	219R			56P2-G 56TB2-U5					.20 .20	NO NO		54 65	
A	219Y			56P2-H 56TB2-T5					.20 .20	NO NO		54 64	
A	220	2	33.00			1.50 2.50	1.25 2.25					31 31, 28	

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	LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A	220B	76	12.00	56TB2-D7 SHLD A220					.20 .20	NO NO		65	
A	220R			56P2-J 56TB2-A7					.20 .20	NO NO		54 64	
A	220Y			56P2-K 56TB2-B7					.20 .20	NO NO		54 65	
A	221	2	33.00			1.50 2.50	1.25 2.25					31 31, 28	
A	221B	76	12.00	56E48 SHLD A221					.20 .20	NO NO			
A	221R			56P2-L 56TB3-N20					.20 .20	NO NO		54	
A	221Y			56P2-M 56TB3-N21					.20 .20	NO NO		54	
A	222	2	33.00			1.50 2.50	1.25 2.25					31 31, 28	
A	222B	76	12.00	56TB3-H12 SHLD A222					.20 .20	NO NO			
A	222R			56P2-P 56TB3-C14					.20 .20	NO NO		54	
A	222Y			56P2-N 56TB3-C13					.20 .20	NO NO		54	
A	223	77	33.00									32 32	

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SCALE-NONE
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	LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A	223R			56P2-R 56TB1-D2					.20 .20	NO NO		54 64	
A	223Y			56P2-S 56TB1-C2					.20 .20	NO NO		54 64	
A	224	2	33.00			1.50 2.50	1.25 2.25					31 31, 28	
A	224B	76	12.00	56TB1-D7 SHLD A224					.20 .20	NO NO			
A	224R			56P2-T 56TB1-C6					.20 .20	NO NO		54	
A	224Y			56P2-U 56TB1-B6					.20 .20	NO NO		54	
A	225	2	37.00			1.50 2.50	1.25 2.25					31 31, 28	
A	225B	76	12.00	56TB2-V6 SHLD A225					.20 .20	NO NO		65	
A	225R			56P2-W 56TB2-W6					.20 .20	NO NO		54 65	
A	225Y			56P2-X 56TB2-X7					.20 .20	NO NO		54 64	
A	226	2	37.00			1.50 2.50	1.25 2.25					31 31, 28	
A	226B	76	12.00	56TB2-D8 SHLD A226					.20 .20	NO NO			

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SCALE-NONE
REV LTR A
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LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 226R			56P2-Y 56TB2-A8					.20 .20	NO NO		54 64	
A 226Y			56P2-Z 56TB2-B8					.20 .20	NO NO		54 65	
A 227	2	45.00			1.50 2.50	1.25 2.25					31 31, 28	
A 227B	76	12.00	56TB3-H14 SHLD A227					.20 .20	NO NO			
A 227R			56P2-A* 56TB3-F14					.20 .20	NO NO		54	
A 227Y			56P2-B* 56TB3-F13					.20 .20	NO NO		54	
A 228	2	45.00			1.50 2.50	1.25 2.25					31 31, 28	
A 228B	76	12.00	56TB3-H13 SHLD A228					.20 .20	NO NO			
A 228R			56P2-F* 56TB3-D13					.20 .20	NO NO		54	
A 228Y			56P2-G* 56TB3-D14					.20 .20	NO NO		54	
A 229	1	38.00			1.50 2.50	1.25 2.25					32 32, 27	
A 229B	76	12.00	56TB1-D7 SHLD A229					.20 .20	NO NO		66	

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SCALE-NONE
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LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 229Y			56P3-A 56TB1-C7					.20 .20	NO NO		54	
A 230	1	38.00			1.50 2.50	1.25 2.25					32 32, 27	
A 230B	76	12.00	56TB1-D8 SHLD A230					.20 .20	NO NO		64	
A 230Y			56P3-B 56TB1-C8					.20 .20	NO NO		54	
A 231	79	38.00									31 31	
A 231G			56P3-U 56TB1-B8					.20 .20	NO NO		54	
A 231N			56P3-W 56TB1-A7					.20 .20	NO NO		54	
A 231R			56P3-C 56TB1-A8					.20 .20	NO NO		54	
A 231Y			56P3-V 56TB1-B7					.20 .20	NO NO		54	
A 232	2	42.00			1.50 2.50	1.25 2.25					31 31, 28	
A 232B	76	12.00	56TB2-M8 SHLD A232					.20 .20	NO NO			
A 232R			56P3-D 56TB2-N8					.20 .20	NO NO		54	

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LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 232Y			56P3-E 56TB2-N7					.20 .20	NO NO		54	
A 233	2	42.00			1.50 2.50	1.25 2.25					31 31, 28	
A 233B	76	12.00	56TB2-V8 SHLD A233					.20 .20	NO NO			
A 233R			56P3-F 56TB2-U8					.20 .20	NO NO		54	
A 233Y			56P3-G 56TB2-U7					.20 .20	NO NO		54	
A 234	2	38.00			1.50 2.50	1.25 2.25					31 31, 28	
A 234B	76	12.00	56TB1-B5 SHLD A234					.20 .20	NO NO		65	
A 234R			56P3-J 56TB1-B5					.20 .20	NO NO		54	
A 234Y			56P3-H 56TB1-C5					.20 .20	NO NO		54 64	
A 235	2	38.00			1.50 2.50	1.25 2.25					31 31, 28	
A 235B	76	12.00	56TB1-A6 SHLD A235					.20 .20	NO NO		65	
A 235R			56P3-K 56TB1-A6					.20 .20	NO NO		54	

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SCALE-NONE
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LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 235Y			56P3-L 56TB1-A5					.20 .20	NO NO		54 64	
A 236	2	50.00			1.50 2.50	1.25 2.25					31 31, 28	
A 236B	76	12.00	56TB3-S3 SHLD A236					.20 .20	NO NO		65	
A 236R			56P3-N 56TB3-R4					.20 .20	NO NO		54 64	
A 236Y			56P3-M 56TB3-R5					.20 .20	NO NO		54 64	
A 237	2	50.00			1.50 2.50	1.25 2.25					31 31, 28	
A 237B	76	12.00	56TB3-T3 SHLD A237					.20 .20	NO NO			
A 237R			56P3-R 56TB3-M14					.20 .20	NO NO		54 64	
A 237Y			56P3-P 56TB3-M13					.20 .20	NO NO		54 64	
A 238	77	38.00									32 32	
A 238R			56P3-X 56TB1-B2					.20 .20	NO NO		54	
A 238Y			56P3-Y 56TB1-A2					.20 .20	NO NO		54	

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SCALE-NONE
REV LTR A
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LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 239	77	38.00									32 32	
A 239R			56P3-Z 56TB1-A4					.20 .20	NO NO		54	
A 239Y			56P3-A* 56TB1-A3					.20 .20	NO NO		54	
A 240	77	38.00									32 32	
A 240R			56P3-B* 56TB1-A3					.20 .20	NO NO		54	
A 240Y			56P3-C* 56TB1-A4					.20 .20	NO NO		54	
A 241	77	38.00									32 32	
A 241R			56P3-D* 56TB1-D3					.20 .20	NO NO		54	
A 241Y			56P3-E* 56TB1-D4					.20 .20	NO NO		54	
A 242	77	38.00									32 32	
A 242R			56P3-F* 56TB1-D4					.20 .20	NO NO		54	
A 242Y			56P3-G* 56TB1-D3					.20 .20	NO NO		54	

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SIZE A
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SCALE-NONE
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LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 243	4	50.00	56P3-J* 56TB3-F5					.20 .20	NO NO		54, 82	
A 244	4	50.00	56P3-H* 56TB3-T20					.20 .20	NO NO		54, 82	
A 246	78	55.00									32 32	
A 246G			56P5-J* 56TB3-D16					.20 .20	NO NO		52 64	
A 246R			56P5-P 56TB3-C18					.20 .20	NO NO		52	
A 246Y			56P5-I* 56TB3-D17					.20 .20	NO NO		52 64	
A 247	77	12.00									32 32	
A 247R			56P5-K 56P5-CC					.20 .20	NO NO		52 52	
A 247Y			56P5-J 56P5-DD					.20 .20	NO NO		52 52	
A 248	2	56.00			1.50 2.50	1.25 2.25					31 31, 28	
A 248B	76	12.00	56TB3-R9 SHLD A248					.20 .20	NO NO			
A 248R			56P5-P* 56TB3-R8					.20 .18	NO NO		52 64	

SIZE A
CODE IDENT NO.
1023055
SCALE-NONE
REV LTR C
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LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 248Y			56P5-N* 56TB3-R7					.20 .18	NO NO		52 64	
A 249	4	55.00	56P5-S 56TB3-K21					.20 .20	NO NO		52, 82	
A 250	4	55.00	56P5-T 56TB3-K21					.20 .20	NO NO		52, 82 65	
A 251	77	18.00									32 32	
A 251R			56P5-EE 56P4-D1					.20 .12	NO NO		52 69	
A 251Y			56P5-FF 56P4-D2					.20 .12	NO NO		52 69	
A 252	2	56.00			1.50 2.50	1.25 2.25					31 31, 28	
A 252B	76	12.00	56TB3-T9 SHLD A252					.20 .20	NO NO		65	
A 252R			56P5-Z 56TB3-T8					.20 .18	NO NO		52 64	
A 252Y			56P5-Y 56TB3-T7					.20 .18	NO NO		52 64	
A 253	2	56.00			1.50 2.50	1.25 2.25					31 31, 28	
A 253B	76	12.00	56TB3-S9 SHLD A253					.20 .20	NO NO		65	

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CODE IDENT NO.
1023055
SCALE-NONE
REV LTR C
SHEET 53 OF 120

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 253R			56P5-A* 56TB3-S8					.20 .20	NO NO		52 64	
A 253Y			56P5-B* 56TB3-S7					.20 .20	NO NO		52 64	
A 254	2	56.00			1.50 2.50	1.25 2.25					31 31, 28	
A 254B	76	12.00	56TB3-M15 SHLD A254					.20 .20	NO NO			
A 254R			56P5-C* 56TB3-M16					.20 .20	NO NO		52 64	
A 254Y			56P5-D* 56TB3-M17					.20 .20	NO NO		52 64	
A 255	2	56.00			1.50 2.50	1.25 2.25					31 31, 28	
A 255B	76	12.00	56TB3-H15 SHLD A255					.20 .20	NO NO			
A 255R			56P5-F* 56TB3-G16					.20 .18	NO NO		52 65	
A 255Y			56P5-E* 56TB3-F16					.20 .18	NO NO		52 65	
A 256	2	56.00			1.50 2.50	1.25 2.25					31 31, 28	
A 256B	76	12.00	56TB3-G9 SHLD A256					.20 .20	NO NO		65	

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	LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM.JKT AREA NO.	TERM.JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A	256R			56P5-G* 56TB3-G10					.20 .20	NO NO		52 65	
A	256Y			56P5-H* 56TB3-F10					.20 .20	NO NO		52 65	
A	257	2	56.00			1.50 2.50	1.25 2.25					31 31, 28	
A	257B	76	12.00	56TB3-S15 SHLD A257					.20 .20	NO NO			
A	257R			56P5-K* 56TB3-T16					.20 .20	NO NO		52 64	
A	257Y			56P5-M* 56TB3-T17					.20 .20	NO NO		52 64	
A	258	2	56.00			1.50 2.50	1.25 2.25					31 31, 28	
A	258B	76	12.00	56TB3-R9 SHLD A258					.20 .20	NO NO		65	
A	258R			56P5-Q* 56TB3-R10					.20 .20	NO NO		52 64	
A	258Y			56P5-R* 56TB3-R11					.20 .20	NO NO		52 64	
A	259	78	55.0G									32 32	
A	259G			56P5-C 56TB3-F18					.20 .20	NO NO		52 64	

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SCALE - NONE
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	LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM.JKT AREA NO.	TERM.JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A	259R			56P5-B 56TB3-C18					.20 .20	NO NO		52 65	
A	259Y			56P5-A 56TB3-D18					.20 .20	NO NO		52 64	
A	260	2	56.00			1.50 2.50	1.25 2.25					31 31, 28	
A	260B	76	12.00	56TB3-S15 SHLD A260					.20 .20	NO NO			
A	260R			56P5-U* 56TB3-S17					.20 .20	NO NO		52 64	
A	260Y			56P5-V* 56TB3-S16					.20 .20	NO NO		52 64	
A	261	2	56.00			1.50 2.50	1.25 2.25					31 31, 28	
A	261B	76	12.00	56TB3-R15 SHLD A261					.20 .20	NO NO			
A	261R			56P5-W* 56TB3-N13					.20 .20	NO NO		52	
A	261Y			56P5-X* 56TB3-N14					.20 .20	NO NO		52	
A	262	2	56.00			1.50 2.50	1.25 2.25					31 31, 28	
A	262B	76	12.00	56TB3-K9 SHLD A262					.20 .20	NO NO			

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SIZE A
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SCALE - NONE
REV LTR A
SHEET 56 OF 120

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	LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM.JKT AREA NO.	TERM.JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A	262R			56P5-Y* 56TB3-K10					.20 .20	NO NO		52	
A	262Y			56P5-Z* 56TB3-K11					.20 .20	NO NO		52	
A	263	2	56.00			1.50 2.50	1.25 2.25					31 31, 28	
A	263B	76	12.00	56TB3-H15 SHLD A263					.20 .20	NO NO			
A	263R			56P5-HH 56TB3-H16					.20 .20	NO NO		52 64	
A	263Y			56P5-BB 56TB3-H17					.20 .20	NO NO		52 64	
A	264	4	55.00	56P5-AA 56TB3-S18					.20 .20	NO NO		52 64	
A	265	77	47.00									32 32	
A	265R			56P5-CC 56TB2-K2					.20 .20	NO NO		52	
A	265Y			56P5-DD 56TB2-L2					.20 .20	NO NO		52	
A	266	77	43.00									32 32	
A	266R			56P5-L 56TB1-T1					.20 .20	NO NO		52	

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SIZE A
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SCALE - NONE
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	LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM.JKT AREA NO.	TERM.JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A	266Y			56P5-M 56TB1-T2					.20 .20	NO NO		52	
A	267	77	18.00									32 32	
A	267R			56P5-X 56P4-F2					.20 .12	NO NO		52 69	
A	267Y			56P5-W 56P4-F1					.20 .12	NO NO		52 69	
A	268	77	18.00									32 32	
A	268R			56P5-J 56P4-E2					.20 .12	NO NO		52 69	
A	268Y			56P5-K 56P4-E1					.20 .12	NO NO		52 69	
A	270	4	55.00	56P5-R 56TB3-F21					.20 .20	NO NO		52, 82	
A	271	78	48.00									32 32	
A	271G			56P6-C 56TB1-G2					.20 .20	NO NO		54	
A	271R			56P6-A 56TB1-H3					.20 .20	NO NO		54	
A	271Y			56P6-B 56TB1-H2					.20 .20	NO NO		54	

SIZE A
CODE IDENT NO.
1023055
SCALE-NONE
REV LTR C
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LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 272	4	48.00	56P6-F 56TB1-D5					.20 .20	NO NO		54, 82 64	
A 273	77	48.00									32 32	
A 273R			56P6-H 56TB1-A2					.20 .20	NO NO		54	
A 273Y			56P6-J 56TB1-B2					.20 .20	NO NO		54	
A 274	4	36.00	56P6-K 56TB3-G5					.20 .20	NO NO		54, 82 64	
A 275	77	36.00									32 32	
A 275R			56P6-M 56TB3-L4					.20 .20	NO NO		54 64	
A 275Y			56P6-L 56TB3-L3					.20 .20	NO NO		54 64	
A 276	4	36.00	56P6-N 56TB3-R6					.20 .20	NO NO		54, 82	
A 277	4	36.00	56P6-Y 56TB3-N6					.20 .20	NO NO		54, 82	
A 278	2	36.00			1.50 2.50	1.25 2.25					31 31, 28	
A 278B	76	12.00	56TB3-R3 SHLD A278					.20 .20	NO NO			

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SCALE-NONE | REV LTR C | SHEET 59 OF 120

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 278R			56P6-V 56TB3-N5					.20 .20	NO NO		54 64	
A 278Y			56P6-W 56TB3-N4					.20 .20	NO NO		54 64	
A 279	2	36.00			1.50 2.50	1.25 2.25					31 31, 28	
A 279B	76	12.00	56TB3-N3 SHLD A279					.20 .20	NO NO		66	
A 279R			56P6-X 56TB3-N1					.20 .20	NO NO		54 64	
A 279Y			56P6-R 56TB3-N2					.20 .20	NO NO		54 64	
A 280	4	36.00	56P6-Z 56TB3-H4					.20 .20	NO NO		54, 82 64	
A 281	77	36.00									32 32	
A 281R			56P6-F* 56TB3-C2					.20 .20	NO NO		54 64	
A 281Y			56P6-G* 56TB3-C3					.20 .20	NO NO		54	
A 282	77	36.00									32 32	
A 282R			56P6-B* 56TB3-L13					.20 .20	NO NO		54 64	

SIZE A | CODE IDENT NO. | 1023055

SCALE-NONE | REV LTR C | SHEET 60 OF 120

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 282Y			56P6-C* 56TB3-K13					.20 .20	NO NO		54 64	
A 283	77	36.00									32 32	
A 283R			56P6-D* 56TB3-K19					.20 .20	NO NO		54	
A 283Y			56P6-E* 56TB3-H19					.20 .20	NO NO		54	
A 284	4	36.00	56P6-D 56TB3-T20					.20 .20	NO NO		54, 82 65	
A 285	4	36.00	56P6-P 56TB3-M1					.20 .20	NO NO		54, 82 64	
A 286	4	36.00	56P6-A* 56TB3-K3					.20 .20	NO NO		54, 82 64	
A 287	4	44.00	56P6-E 56TB2-D4					.20 .20	NO NO		54, 82	
A 288	4	36.00	56P6-G 56TB3-F21					.20 .20	NO NO		54, 82	
A 289	6	53.00			2.00 2.50	1.75 2.25					31 31, 28	
A 289B	76	12.00	56TB1-S8 SHLD A289					.20 .20	NO NO		64	
A 289L			56P7-C 56TB1-U8					.40 .20	NO NO		54 64	

SIZE A | CODE IDENT NO. | 1023055

SCALE-NONE | REV LTR C | SHEET 61 OF 120

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 289R			56P7-A 56TB1-T8					.40 .20	NO NO		54 64	
A 289W			56P7-B 56TB1-U7					.40 .20	NO NO		54 64	
A 290	6	53.00			2.00 2.50	1.75 2.25					31 31, 28	
A 290B	76	12.00	56TB1-N8 SHLD A290					.20 .20	NO NO		66	
A 290L			56P7-F 56TB1-L7					.40 .20	NO NO		54 64	
A 290R			56P7-D 56TB1-M8					.40 .20	NO NO		54 64	
A 290W			56P7-E 56TB1-L8					.40 .20	NO NO		54 64	
A 291	6	53.00			2.00 2.50	1.75 2.25					31 31, 28	
A 291B	76	12.00	56TB1-S6 SHLD A291					.20 .20	NO NO		65	
A 291L			56P7-J 56TB1-U6					.40 .20	NO NO		54 64	
A 291R			56P7-G 56TB1-T6					.40 .20	NO NO		54 64	
A 291W			56P7-H 56TB1-U5					.40 .20	NO NO		54 64	

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SCALE-NONE | REV LTR / A | SHEET 62 OF 120

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LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 292	6	53.00			2.00 2.50	1.75 2.25					31 31, 28	
A 292B	76	12.00	56TB1-S3 SHLD A292					.20 .20	NO NO		66	
A 292L			56P7-M 56TB1-U3					.40 .20	NO NO		54 64	
A 292R			56P7-K 56TB1-U4					.40 .20	NO NO		54 64	
A 292W			56P7-L 56TB1-T3					.40 .20	NO NO		54 64	
A 293	6	53.00			2.00 2.50	1.75 2.25					31 31, 28	
A 293B	76	12.00	56TB1-N4 SHLD A293					.20 .20	NO NO			
A 293L			56P7-R 56TB1-M4					.40 .20	NO NO		54 64	
A 293R			56P7-N 56TB1-L4					.40 .20	NO NO		54 64	
A 293W			56P7-P 56TB1-L3					.40 .20	NO NO		54 64	
A 294	6	53.00			2.00 2.50	1.75 2.25					31 31, 28	
A 294B	76	12.00	56TB1-N5 SHLD A294					.20 .20	NO NO		28	

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SCALE-NONE	REV LTR A	SHEET 63 OF 120

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 294L			56P7-W 56TB1-L5					.40 .20	NO NO		54 64	
A 294R			56P7-U 56TB1-M5					.40 .20	NO NO		54 64	
A 294W			56P7-V 56TB1-L6					.40 .20	NO NO		54 64	
A 295	77	53.00									32 32	
A 295R			56P7-X 56TB1-M7					.20 .20	NO NO		54 64	
A 295Y			56P7-Y 56TB1-M6					.20 .20	NO NO		54 64	
A 296	77	53.00									32 32	
A 296R			56P7-Z 56TB1-M3					.20 .20	NO NO		54 64	
A 296Y			56P7-A* 56TB1-N2					.20 .20	NO NO		54 64	
A 297	77	53.00									32 32	
A 297R			56P7-B* 56TB1-T5					.20 .20	NO NO		54 64	
A 297Y			56P7-C* 56TB1-T4					.20 .20	NO NO		54 64	

MANNED SPACECRAFT CENTER HOUSTON, TEXAS	SIZE A	1023055
SCALE-NONE	REV LTR A	SHEET 64 OF 120

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 298	79	53.00									31 31	
A 298G			56P7-G* 56TB1-B4					.20 .20	NO NO		54 64	
A 298N			56P7-H* 56TB1-C4					.20 .20	NO NO		54 64	
A 298R			56P7-F* 56TB1-C3					.20 .20	NO NO		54 64	
A 298Y			56P7-J* 56TB1-B3					.20 .20	NO NO		54 64	
A 299	77	55.00									32 32	
A 299R			56P8-A 56TB2-U3					.20 .20	NO NO		52	
A 299Y			56P8-B 56TB2-T2					.20 .20	NO NO		52	
A 300	78	46.00									32 32	
A 300G			56P8-G 56TB3-C16					.20 .20	NO NO		52	
A 300R			56P8-F 56TB3-C19					.20 .20	NO NO		52	
A 300Y			56P8-E 56TB3-C17					.20 .20	NO NO		52	

MANNED SPACECRAFT CENTER HOUSTON, TEXAS	SIZE A	1023055
SCALE-NONE	REV LTR A	SHEET 65 OF 120

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 301	77	55.00									32 32	
A 301R			56P8-J 56TB2-K2					.20 .20	NO NO		52 65	
A 301Y			56P8-K 56TB2-L2					.20 .20	NO NO		52 65	
A 302	2	46.00			1.50 2.50	1.25 2.25					31 31, 28	
A 302B	76	12.00	56TB3-S15 SHLD A302					.20 .20	NO NO		66	
A 302R			56P8-N 56TB3-R17					.20 .20	NO NO		52 64	
A 302Y			56P8-P 56TB3-R16					.20 .20	NO NO		52 64	
A 303	4	46.00	56P8-R 56TB3-K15					.20 .20	NO NO		52, 82	
A 304	2	46.00			1.50 2.50	1.25 2.25					31 31, 28	
A 304B	76	12.00	56TB3-H15 SHLD A304					.20 .20	NO NO		66	
A 304R			56P8-T 56TB3-K17					.20 .20	NO NO		52 64	
A 304Y			56P8-S 56TB3-K16					.20 .20	NO NO		52 64	

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SCALE-NONE	REV LTR C	SHEET 66 OF 120

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 305	4	46.00	56P8-U 56TB3-R18					.20 .20	NO NO		52, 82 64	
A 306	2	46.00			1.50 2.50	1.25 2.25					31 31, 28	
A 306B	76	12.00	56TB3-T15 SHLD A306					.20 .20	NO NO			
A 306R			56P8-V 56TB3-S13					.20 .20	NO NO		52 64	
A 306Y			56P8-W 56TB3-S14					.20 .20	NO NO		52 64	
A 307	2	46.00			1.50 2.50	1.25 2.25					31 31, 28	
A 307B	76	12.00	56TB3-T15 SHLD A307					.20 .20	NO NO		66	
A 307R			56P8-X 56TB3-T14					.20 .20	NO NO		52 64	
A 307Y			56P8-Y 56TB3-T13					.20 .20	NO NO		52 64	
A 308	78	46.00									32 32	
A 308G			56P8-D* 56TB3-F17					.20 .20	NO NO		52	
A 308R			56P8-H 56TB3-C19					.20 .20	NO NO		52 65	

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SCALE-NONE | REV LTR C | SHEET 67 OF 120

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LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 308Y			56P8-C* 56TB3-G17					.20 .20	NO NO		52	
A 309	2	46.00			1.50 2.50	1.25 2.25					31 31, 28	
A 309B	76	12.00	56TB3-M15 SHLD A309					.20 .20	NO NO			
A 309R			56P8-E* 56TB3-N16					.20 .20	NO NO		52 64	
A 309Y			56P8-F* 56TB3-N17					.20 .20	NO NO		52 64	
A 310	2	46.00			1.50 2.50	1.25 2.25					31 31, 28	
A 310B	76	12.00	56TB3-M15 SHLD A310					.20 .20	NO NO		66	
A 310R			56P8-G* 56TB3-L16					.20 .20	NO NO		52 64	
A 310Y			56P8-I* 56TB3-L17					.20 .20	NO NO		52 64	
A 311	4	46.00	56P8-H* 56TB3-T18					.20 .20	NO NO		52, 82 64	
A 312	2	46.00			1.50 2.50	1.25 2.25					31 31, 28	
A 312B	76	12.00	56TB3-K9 SHLD A312					.20 .20	NO NO		66	

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SCALE-NONE | REV LTR C | SHEET 68 OF 120

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 312R			56P8-K* 56TB3-K11					.20 .20	NO NO		52 66	
A 312Y			56P8-J* 56TB3-K10					.20 .20	NO NO		52 66	
A 313	2	46.00			1.50 2.50	1.25 2.25					31 31, 28	
A 313B	76	12.00	56TB3-R15 SHLD A313					.20 .20	NO NO		66	
A 313R			56P8-N* 56TB3-N14					.20 .20	NO NO		52 66	
A 313Y			56P8-M* 56TB3-N13					.20 .20	NO NO		52 66	
A 314	77	59.00									32 32	
A 314R			56P8-R* 56TB1-T1					.20 .20	NO NO		52	
A 314Y			56P8-S* 56TB1-T2					.20 .20	NO NO		52	
A 315	4	46.00	56P8-B* 56TB3-K15					.20 .20	NO NO		52, 82	
A 316	4	46.00	56P8-T* 56TB3-F22					.20 .20	NO NO		52, 82	
A 317	77	42.00									32 32	

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LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 317R			56P9-5 56TB3-T19					.10 .20	NO NO		49 64	
A 317Y			56P9-6 56TB3-S19					.10 .20	NO NO		49 64	
A 318	77	42.00									32 32	
A 318R			56P9-9 56TB3-B18					.10 .20	NO NO		49 64	
A 318Y			56P9-8 56TB3-B19					.10 .20	NO NO		49 64	
A 319	78	54.00									32 32	
A 319G			56P9-78 56TB1-H2					.10 .20	NO NO		49 65	
A 319R			56P9-67 56TB1-G2					.10 .20	NO NO		49 65	
A 319Y			56P9-79 56TB1-H3					.10 .20	NO NO		49 65	
A 320	77	42.00									32 32	
A 320R			56P9-22 56TB3-D2					.10 .20	NO NO		49	
A 320Y			56P9-34 56TB3-C3					.10 .20	NO NO		49	

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LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 321	77	42.00									32 32	
A 321R			56P9-45 56TB2-K1					.10 .20	NO NO		49	
A 321Y			56P9-55 56TB2-L1					.10 .20	NO NO		49	
A 322	77	50.00									32 32	
A 322R			56P9-56 56TB2-U3					.10 .20	NO NO		49	
A 322Y			56P9-57 56TB2-T3					.10 .20	NO NO		49	
A 323	77	54.00									32 32	
A 323R			56P9-59 56TB1-C6					.10 .20	NO NO		49 65	
A 323Y			56P9-58 56TB1-B6					.10 .20	NO NO		49 65	
A 324	77	54.00									32 32	
A 324R			56P9-69 56TB1-H4					.10 .20	NO NO		49	
A 324Y			56P9-81 56TB1-G4					.10 .20	NO NO		49	

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LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 325	77	54.00									32 32	
A 325R			56P9-68 56TB1-H7					.10 .20	NO NO		49	
A 325Y			56P9-80 56TB1-G7					.10 .20	NO NO		49	
A 326	4	42.00	56P9-20 56TB3-N22					.10 .20	NO NO		49, 82 64	
A 327	4	42.00	56P9-19 56TB3-T21					.10 .20	NO NO		49, 82 64	
A 328	4	42.00	56P9-65 56TB3-H20					.10 .20	NO NO		49, 82 64	
A 329	4	42.00	56P9-66 56TB3-L21					.10 .20	NO NO		49, 82	
A 330	4	42.00	56P9-4 56TB3-R20					.10 .20	NO NO		49, 82 64	
A 331	4	42.00	56P9-18 56TB3-N19					.10 .20	NO NO		49, 82	
A 332	4	54.00	56P9-13 56TB1-M6					.10 .20	NO NO		49, 82 65	
A 333	4	42.00	56P9-49 56TB3-B5					.10 .20	NO NO		49, 82	
A 334	4	42.00	56P9-48 56TB3-M6					.10 .20	NO NO		49, 82	

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LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 335	4	42.00	56P9-47 56TB3-B3					.10 .20	NO NO		49, 82	
A 336	4	54.00	56P9-12 56TB1-H8					.10 .20	NO NO		49, 82 65	
A 337	4	12.00	56P9-27 56E21					.10 .20	NO NO		49, 82 28	
A 338	2	50.00			1.00 2.50	.75 2.25					31 31, 28	
A 338B	76	12.00	56TB2-S3 SHLD A338					.20 .20	NO NO		65	
A 338R			56P9-39 56TB2-N3					.10 .20	NO NO		49 65	
A 338Y			56P9-38 56TB2-R3					.10 .20	NO NO		49 65	
A 339	4	12.00	56P9-37 56E21					.10 .20	NO NO		49, 82	
A 340	4	12.00	56P9-26 56E21					.10 .20	NO NO		49, 82	
A 341	4	12.00	56P9-25 56E21					.10 .20	NO NO		49, 82	
A 342	4	42.00	56P9-10 56TB3-F5					.10 .20	NO NO		49, 82	
A 343	4	54.00	56P9-23 56TB1-S5					.10 .20	NO NO		49, 82	

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MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 344	4	42.00	56P9-11 56TB3-D3					.10 .20	NO NO		49, 82 65	
A 345	4	54.00	56P9-46 56TB1-U2					.10 .20	NO NO		49, 82 66	
A 346	4	42.00	56P9-35 56TB3-B4					.10 .20	NO NO		49, 82	
A 347	4	12.00	56P9-36 56E21					.10 .20	NO NO		49, 82	
A 348	4	12.00	56P9-24 56E21					.10 .20	NO NO		49, 82	
A 349	4	54.00	56P9-33 56TB1-L2					.10 .20	NO NO		49, 82 64	
A 350	4	54.00	56P9-43 56TB1-M2					.10 .20	NO NO		49, 82 64	
A 351	4	54.00	56P9-44 56TB1-T7					.10 .20	NO NO		49, 82 64	
A 352	77	54.00									32 32	
A 352R			56P9-93 56TB1-D4					.10 .20	NO NO		49 66	
A 352Y			56P9-106 56TB1-D3					.10 .20	NO NO		49 66	
A 353	77	54.00									32 32	

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SERIES 0 SPARE 1023055

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 353R			56P9-107 56TB1-A3					.10 .20	NO NO		49 66	
A 353Y			56P9-108 56TB1-A4					.10 .20	NO NO		49 66	
A 354	77	54.00									32 32	
A 354R			56P9-94 56TB1-B2					.10 .20	NO NO		49 66	
A 354Y			56P9-95 56TB1-A2					.10 .20	NO NO		49 66	
A 355	2	42.00			1.00 2.50	.75 2.25					31 31, 28	
A 355B	76	12.00	56TB3-H13 SHLD A355					.20 .20	NO NO		66	
A 355R			56P9-1 56TB3-D13					.10 .20	NO NO		49 66	
A 355Y			56P9-14 56TB3-D14					.10 .20	NO NO		49 66	
A 356	2	42.00			1.00 2.50	.75 2.25					31 31, 28	
A 356B	76	12.00	56TB3-H14 SHLD A356					.20 .20	NO NO		66	
A 356R			56P9-2 56TB3-F13					.10 .20	NO NO		49 66	

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SERIES 0 SPARE 1023055

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 356Y			56P9-3 56TB3-F14					.10 .20	NO NO		49 66	
A 357	2	42.00			1.00 2.50	.75 2.25					31 31, 28	
A 357B	76	12.00	56TB3-H12 SHLD A357					.20 .20	NO NO		66	
A 357R			56P9-15 56TB3-C13					.10 .20	NO NO		49 66	
A 357Y			56P9-29 56TB3-C14					.10 .20	NO NO		49 66	
A 358	2	42.00			1.00 2.50	.75 2.25					31 31, 28	
A 358B	76		56E48 SHLD A358					.20 .20	NO NO			
A 358R			56P9-28 56TB3-N20					.10 .20	NO NO		49 66	
A 358Y			56P9-40 56TB3-N21					.10 .20	NO NO		49 66	
A 359	2	50.00			1.00 2.50	.75 2.25					31 31, 28	
A 359B	76	12.00	56TB2-V8 SHLD A359					.20 .20	NO NO		66	
A 359R			56P9-16 56TB2-U7					.10 .20	NO NO		49 65	

MANNED SPACECRAFT CENTER HOUSTON, TEXAS	SIZE A	1023055	
SCALE-NONE	REV LTR A	SHEET 76 OF 120	

SERIES 0 SPARE 1023055 C

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 359Y			56P9-17 56TB2-U8					.10 .20	NO NO		49 66	
A 360	2	50.00			1.00 2.50	.75 2.25					31 31, 28	
A 360B	76	12.00	56TB2-N8 SHLD A360					.18 .20	NO NO		66	
A 360R			56P9-30 56TB2-N8					.10 .18	NO NO		49 65	
A 360Y			56P9-31 56TB2-N7					.10 .18	NO NO		49 66	
A 361	4	54.00	56P9-41 56TB1-C8					.10 .18	NO NO		49, 82 65	
A 362	4	54.00	56P9-52 56TB1-C7					.10 .18	NO NO		49, 82 65	
A 363	79	54.00									31 31	
A 363G			56P9-61 56TB1-B8					.10 .18	NO NO		49 65	
A 363N			56P9-51 56TB1-B7					.10 .18	NO NO		49 65	
A 363R			56P9-60 56TB1-A7					.10 .18	NO NO		49 65	
A 363Y			56P9-50 56TB1-A8					.10 .18	NO NO		49 65	

SIZE A	CODE IDENT NO.	1023055	
SCALE-NONE	REV LTR C	SHEET 77 OF 120	

SERIES 0 SPARE 1023055

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 364	2	50.00			1.00 2.50	.75 2.25					31 31, 28	
A 364B	76	12.00	56TB2-F2 SHLD A364					.20 .20	NO NO		66	
A 364R			56P9-96 56TB2-H2					.10 .20	NO NO		49 66	
A 364Y			56P9-82 56TB2-G2					.10 .20	NO NO		49 66	
A 365	2	50.00			1.00 2.50	.75 2.25					31 31, 28	
A 365B	76	12.00	56TB2-F7 SHLD A365					.20 .20	NO NO		66	
A 365R			56P9-70 56TB2-H7					.10 .20	NO NO		49 66	
A 365Y			56P9-71 56TB2-G7					.10 .20	NO NO		49 66	
A 366	2	50.00			1.00 2.50	.75 2.25					31 31, 28	
A 366B	76	12.00	56TB2-S2 SHLD A366					.20 .20	NO NO		66	
A 366R			56P9-72 56TB2-N2					.10 .20	NO NO		49 66	
A 366Y			56P9-83 56TB2-R2					.10 .20	NO NO		49 66	

MANNED SPACECRAFT CENTER HOUSTON, TEXAS	SIZE A	1023055	
SCALE-NONE	REV LTR A	SHEET 78 OF 120	

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 367	4	42.00	56P9-98 56TB3-D4					.10 .20	NO NO		49, 82 64	
A 368	4	42.00	56P9-85 56TB3-C5					.10 .20	NO NO		49, 82 64	
A 369	4	42.00	56P9-97 56TB3-D5					.10 .20	NO NO		49, 82 64	
A 370	4	42.00	56P9-73 56TB3-C4					.10 .20	NO NO		49, 82 64	
A 371	78	42.00									32 32	
A 371G			56P9-64 56TB3-G19					.10 .20	NO NO		49 64	
A 371R			56P9-74 56TB3-F19					.10 .20	NO NO		49 64	
A 371Y			56P9-75 56TB3-D19					.10 .20	NO NO		49 64	
A 372	77	42.00									32 32	
A 372R			56P9-87 56TB3-D9					.10 .20	NO NO		49 64	
A 372Y			56P9-88 56TB3-D10					.10 .20	NO NO		49 64	
A 373	77	42.00									32 32	

SIZE A
CODE IDENT NO.
1023055
SCALE-NONE
REV LTR C
SHEET 79 OF 120

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 373R			56P9-100 56TB3-D7					.10 .20	NO NO		49 64	
A 373Y			56P9-101 56TB3-C7					.10 .20	NO NO		49 64	
A 374	77	42.00									32 32	
A 374R			56P9-89 56TB3-B7					.10 .20	NO NO		49 64	
A 374Y			56P9-102 56TB3-B8					.10 .20	NO NO		49 64	
A 375	77	42.00									32 32	
A 375R			56P9-90 56TB3-C9					.10 .20	NO NO		49 64	
A 375Y			56P9-103 56TB3-C10					.10 .20	NO NO		49 64	
A 376	77	42.00									32 32	
A 376R			56P9-91 56TB3-C17					.10 .20	NO NO		49 65	
A 376Y			56P9-92 56TB3-C16					.10 .20	NO NO		49 65	
A 377	77	42.00									32 32	

MANNED
SPACECRAFT
CENTER
HOUSTON, TEXAS
SIZE A
1023055
SCALE-NONE
REV LTR A
SHEET 80 OF 120

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 377R			56P9-104 56TB3-B9					.10 .20	NO NO		49 64	
A 377Y			56P9-105 56TB3-B10					.10 .20	NO NO		49 64	
A 378	77	42.00									32 32	
A 378R			56P9-76 56TB3-G17					.10 .20	NO NO		49 65	
A 378Y			56P9-77 56TB3-F17					.10 .20	NO NO		49 65	
A 379	77	42.00									32 32	
A 379R			56P9-42 56TB3-K19					.10 .20	NO NO		49 65	
A 379Y			56P9-53 56TB3-H19					.10 .20	NO NO		49 65	
A 380	4	42.00	56P9-62 56TB3-L19					.10 .20	NO NO		49, 82 64	
A 381	4	42.00	56P9-54 56TB3-M19					.10 .20	NO NO		49, 82 64	
A 382	4	42.00	56P9-63 56TB3-N19					.10 .20	NO NO		49, 82 65	
A 383	77	42.00									32 32	

SIZE A
CODE IDENT NO.
1023055
SCALE-NONE
REV LTR C
SHEET 81 OF 120

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 383R			56P9-86 56TB3-D8					.10 .20	NO NO		49 64	
A 383Y			56P9-99 56TB3-C8					.10 .20	NO NO		49 64	
A 384	4	50.00	56P9-84 56TB3-D6					.10 .20	NO NO		49, 82 65	
A 385	4	50.00	56P9-32 56TB2-F4					.10 .20	NO NO		49, 82 64	
A 386	77	42.00									32 32	
A 386R			56P9-21 56TB3-S20					.10 .20	NO NO		49 64	
A 386Y			56P9-7 56TB3-R19					.10 .20	NO NO		49 64	
A 387	78	40.00									32 32	
A 387G			56J9-5 56J22-232					.10 .10	NO NO		49 49	
A 387R			56J9-18 56J22-195					.10 .10	NO NO		49 49	
A 387Y			56J9-4 56J22-233					.10 .10	NO NO		49 49	
A 388	78	40.00									32 32	

SIZE A
CODE IDENT NO.
1023055
SCALE-NONE
REV LTR C
SHEET 82 OF 120

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 388G			56J9-6 56J22-197					.10 .10	NO NO		49 49	
A 388R			56J9-7 56J22-235					.10 .10	NO NO		49 49	
A 388Y			56J9-20 56J22-198					.10 .10	NO NO		49 49	
A 389	78	40.00									32 32	
A 389G			56J9-17 56J22-192					.10 .10	NO NO		49 49	
A 389R			56J9-16 56J22-230					.10 .10	NO NO		49 49	
A 389Y			56J9-3 56J22-193					.10 .10	NO NO		49 49	
A 390	4	40.00	56J9-73 56TB3-F3					.10 .20	NO NO		49, 82	
A 391	4	40.00	56J9-21 56TB3-K4					.10 .20	NO NO		49, 82 64	
A 392	4	40.00	56J9-2 56TB3-M3					.10 .20	NO NO		49, 82 64	
A 393	78	40.00									32 32	
A 393G			56J9-50 56J22-238					.10 .10	NO NO		49 49	

SIZE A
CODE IDENT NO.
1023055
SCALE-NONE
REV LTR C
SHEET 83 OF 120

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 393R			56J9-41 56J22-237					.10 .10	NO NO		49 49	
A 393Y			56J9-40 56J22-200					.10 .10	NO NO		49 49	
A 394	4	40.00	56J9-72 56TB3-B11					.10 .20	NO NO		49, 82 64	
A 395	4	40.00	56J9-97 56TB3-R6					.10 .20	NO NO		49, 82 65	
A 396	4	40.00	56J9-98 56TB3-C1					.10 .20	NO NO		49, 82 64	
A 397	4	40.00	56J9-104 56TB3-M4					.10 .20	NO NO		49, 82 64	
A 398	4	40.00	56J9-86 56TB3-L1					.10 .20	NO NO		49, 82 65	
A 399	4	40.00	56J9-102 56TB3-M3					.10 .20	NO NO		49, 82 64	
A 400	4	40.00	56J9-76 56TB3-L5					.10 .20	NO NO		49, 82 64	
A 401	79	40.00									31 31	
A 401G			56J9-87 56TB3-H1					.10 .20	NO NO		49 64	
A 401N			56J9-88 56TB3-G2					.10 .20	NO NO		49 64	

SIZE A
CODE IDENT NO.
1023055
SCALE-NONE
REV LTR C
SHEET 84 OF 120

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 401R			56J9-100 56TB3-G1					.10 .20	NO NO		49 64	
A 401Y			56J9-101 56TB3-H2					.10 .20	NO NO		49 64	
A 402	4	40.00	56J9-90 56TB3-N6					.10 .20	NO NO		49, 82 65	
A 403	4	40.00	56J9-74 56TB3-H5					.10 .20	NO NO		49, 82 64	
A 404	4	40.00	56J9-59 56TB3-G18					.10 .20	NO NO		49, 82 64	
A 405	4	40.00	56J9-58 56TB3-K18					.10 .20	NO NO		49, 82 64	
A 406	4	12.00	56J9-60 56E56					.10 .20	NO NO		49, 82 27	
A 407	2	39.00			1.00 2.50	.75 2.25					31 31, 28	
A 407B	76	12.00	56E44 SHLD A407					.20 .20	NO NO			
A 407R			56E58 56J21-17					.20 .10	NO NO		28 49	
A 407Y			56J9-70 56J21-16					.10 .10	NO NO		49 49	
A 408	4	40.00	56J9-66 56TB3-H6					.10 .20	NO NO		49, 82 65	

SIZE A
CODE IDENT NO.
1023055
SCALE-NONE
REV LTR C
SHEET 85 OF 120

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 409	77	40.00									32 32	
A 409R			56J9-68 56TB3-B13					.10 .20	NO NO		49 65	
A 409Y			56J9-81 56TB3-B12					.10 .20	NO NO		49 65	
A 410	4	53.00	56J9-67 56TB1-G1					.10 .20	NO NO		49, 82 65	
A 411	4	49.00	56J9-93 56TB2-S4					.10 .20	NO NO		49, 82 65	
A 412	4	49.00	56J9-79 56TB2-S5					.10 .20	NO NO		49, 82 65	
A 413	4	49.00	56J9-106 56TB2-S6					.10 .20	NO NO		49, 82 65	
A 414	4	49.00	56J9-78 56TB2-S7					.10 .20	NO NO		49, 82 65	
A 415	4	12.00	56J9-42 56E56					.10 .20	NO NO		49, 82	
A 416	77	49.00									32 32	
A 416R			56J9-80 56TB2-K1					.10 .20	NO NO		49	
A 416Y			56J9-69 56TB2-L1					.10 .20	NO NO		49	

SIZE A
CODE IDENT NO.
1023055
SCALE-NONE
REV LTR C
SHEET 86 OF 120

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 420	4	12.00	56J9-36 56E56					.10 .20	NO NO		49, 82	
A 425	3	40.00			1.00 2.50	.75 2.25					31 31, 28	
A 425B	76	12.00	56TB3-M9 SHLD A425					.20 .20	NO NO		65	
A 425G			56J9-24 56TB3-M12					.10 .20	NO NO		49 64	
A 425R			56J9-10 56TB3-M10					.10 .20	NO NO		49 64	
A 425Y			56J9-23 56TB3-M11					.10 .20	NO NO		49 64	
A 426	2	40.00			1.00 2.50	.75 2.25					31 31, 28	
A 426B	76	12.00	56TB3-G12 SHLD A426					.20 .20	NO NO		65	
A 426R			56J9-19 56TB3-G11					.10 .20	NO NO		49 64	
A 426Y			56J9-33 56TB3-G12					.10 .20	NO NO		49	
A 427	2	40.00			1.00 2.50	.75 2.25					31 31, 28	
A 427B	76	12.00	56TB3-F12 SHLD A427					.20 .20	NO NO		65	

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 427R			56J9-35 56TB3-F11					.10 .20	NO NO		49 64	
A 427Y			56J9-34 56TB3-F12					.10 .20	NO NO		49	
A 428	4	40.00	56J9-99 56TB3-L18					.10 .20	NO NO		49, 82 64	
A 429	4	40.00	56J9-1 56TB3-L22					.10 .20	NO NO		49, 82	
A 431	77	49.00									32 32	
A 431R			56J9-32 56TB2-A2					.10 .20	NO NO		49 65	
A 431Y			56J9-44 56TB2-A1					.10 .20	NO NO		49 65	
A 433	2	39.00			3.00 2.50	2.75 2.25					31 31, 28	
A 433B	76	12.00	56E44 SHLD A433					.20 .20	NO NO			
A 433R			56E58 56J21-87					.20 .10	NO NO		 49	
A 433Y			56J9-30 56J21-86				2.00	.10 .10	NO NO		49 49	
A 434	2	39.00			3.00 2.50	2.75 2.25					31 31, 28	

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 434B	76	12.00	56E44 SHLD A434					.20 .20	NO NO			
A 434R			56E58 56J21-89					.20 .10	NO NO		 49	
A 434Y			56J9-31 56J21-88				2.00	.10 .10	NO NO		49 49	
A 435	4	40.00	56J9-51 56TB3-M22					.10 .20	NO NO		49, 82	
A 436	4	40.00	56J9-83 56TB3-L15					.10 .20	NO NO		49, 82 64	
A 437	2	39.00			3.00 2.50	2.75 2.25					31 31, 28	
A 437B	76	12.00	56E44 SHLD A437					.20 .20	NO NO			
A 437R			56E58 56J21-55					.20 .10	NO NO		 49	
A 437Y			56J9-25 56J21-54				2.00	.10 .10	NO NO		49 49	
A 438	4	40.00	56J9-92 56TB3-K1					.10 .20	NO NO		49, 82 64	
A 439	4	40.00	56J9-94 56TB3-D1					.10 .20	NO NO		49, 82 64	
A 440	2	39.00			1.00 2.50	.75 2.25					31, 28 31	

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 440A	76	12.00	SHLD A440 56E44					.20 .20	NO NO			
A 440R			56J21-120 56E58					.10 .20	NO NO		49	
A 440Y			56J21-119 56E56					.10 .20	NO NO		49	
A 441	4	40.00	56J9-103 56TB3-M5					.10 .20	NO NO		49, 82 64	
A 442	4	40.00	56J9-85 56TB3-G4					.10 .20	NO NO		49, 82 64	
A 443	4	40.00	56J9-89 56TB3-G3					.10 .20	NO NO		49, 82 64	
A 444	4	40.00	56J9-75 56TB3-K5					.10 .20	NO NO		49, 82 64	
A 445	4	40.00	56J9-71 56TB3-M20					.10 .20	NO NO		49, 82 66	
A 446	4	40.00	56J9-105 56TB3-K2					.10 .20	NO NO		49, 82 64	
A 447	4	42.00	56J9-95 56P10-48					.10 .10	NO NO		49, 82 49	
A 448	77	40.00									32 32	
A 448R			56J9-65 56P10-39					.10 .10	NO NO		49 49	

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 448Y			56J9-77					.10	NO		49	
			56P10-38					.10	NO		49	
A 449	2	39.00			3.00	2.75					31	
					2.50	2.25					31, 28	
A 449B	76	12.00	56E44					.20	NO			
			SHLD A449					.20	NO			
A 449R			56J9-37				2.00	.10	NO		49	
			56J21-18					.10	NO		49	
A 449Y			56E58					.20	NO			
			56J21-19					.10	NO		49	
A 450	4	49.00	56J9-26					.10	NO		49, 82	
			56TB2-D6					.20	NO			
A 451	4	40.00	56J9-91					.10	NO		49, 82	
			56TB3-F22					.20	NO			
A 452	4	54.00	56P10-13					.10	NO		49, 82	
			56TB1-S5					.20	NO		66	
A 453	4	42.00	56P10-10					.10	NO		49, 82	
			56J9-29					.10	NO		49, 82	
A 454	4	42.00	56P10-12					.10	NO		49, 82	
			56TB3-F5					.20	NO		66	
A 455	4	50.00	56P10-24					.10	NO		49, 82	
			56TB2-S8					.20	NO		65	
A 458	4	12.00	56TB2-D5					.20	NO		65	
			56E48					.20	NO			

SIZE A
CODE IDENT NO.
1023055
SCALE-NONE
REV LTR C
SHEET 91 OF 120

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LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 460	4	42.00	56P10-49					.10	NO		49, 82	
			56TB3-B14					.20	NO		65	
A 461	4	41.00	56P10-8					.10	NO		49, 82	
			56J22-171					.10	NO		49	
A 462	4	42.00	56P10-9					.10	NO		49, 82	
			56TB3-F1					.20	NO		64	
A 464	4	49.00	56J10-2					.10	NO		49, 82	
			56TB3-F3					.20	NO		66	
A 465	4	49.00	56J10-6					.10	NO		49, 82	
			56TB3-M6					.20	NO		66	
A 466	4	61.00	56J10-7					.10	NO		49, 82	
			56TB1-F1					.20	NO			
A 467	77	48.00									32	
											32	
A 467R			56J10-38					.10	NO		49	B
			56J21-84					.10	NO		49	
A 467Y			56E25					.20	NO		28	B
			56J21-85					.10	NO		49	
A 468	77	48.00									32	
											32	
A 468R			56E25					.20	NO			B
			56J21-13					.10	NO		49	
A 468Y			56J10-49					.10	NO		49	B
			56J21-12					.10	NO		49	

SIZE A
CODE IDENT NO.
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SCALE-NONE
REV LTR C
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LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 469	4	48.00	56J10-72					.10	NO		49, 82	A
			56J21-141					.10	NO		49	
A 470	77	48.00									32	
											32	
A 470R			56J10-42					.10	NO		49	A
			56J21-47					.10	NO		49	
A 470Y			56E24					.20	NO		28	A
			56J21-48					.10	NO		49	
A 471	77	48.00									32	
											32	
A 471R			56J10-20					.10	NO		49	A
			56J21-82					.10	NO		49	
A 471Y			56E24					.20	NO			A
			56J21-83					.10	NO		49	
A 472	77	48.00									32	
											32	
A 472R			56J10-36					.10	NO		49	B
			56J21-150					.10	NO		49	
A 472Y			56E25					.20	NO			B
			56J21-151					.10	NO		49	
A 473	4	48.00	56J10-71					.10	NO		49, 82	A
			56J21-75					.10	NO		49	
A 474	78	49.00									32	
											32	

SIZE A
CODE IDENT NO.
1023055
SCALE-NONE
REV LTR C
SHEET 93 OF 120

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 474G			56J10-5					.10	NO		49	
			56TB3-B5					.20	NO		66	
A 474R			56J10-4					.10	NO		49	
			56TB3-B3					.20	NO		66	
A 474Y			56J10-3					.10	NO		49	
			56TB3-B4					.20	NO		66	
A 475	4	61.00	56J10-12					.10	NO		49, 82	
			56TB1-F8					.20	NO		65	
A 476	4	48.00	56J10-70					.10	NO		49, 82	A
			56J21-3					.10	NO		49	
A 477	4	48.00	56J10-57					.10	NO		49, 82	
			56J21-108					.10	NO		49	
A 478	4	61.00	56J10-9					.10	NO		49, 82	
			56TB1-H5					.20	NO		64	
A 479	78	61.00									32	
											32	
A 479G			56J10-22					.10	NO		49	
			56TB1-K3					.20	NO		65	
A 479R			56J10-24					.10	NO		49	
			56TB1-K5					.20	NO		65	
A 479Y			56J10-21					.10	NO		49	
			56TB1-K4					.20	NO		65	
A 480	78	61.00									32	
											32	

SIZE A
CODE IDENT NO.
1023055
SCALE-NONE
REV LTR C
SHEET 94 OF 120

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM.JKT AREA NO.	STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 480G			56J10-23 56TB1-K8					.10 .20	NO NO		49 65	
A 480R			56J10-25 56TB1-K6					.10 .20	NO NO		49 65	
A 480Y			56J10-26 56TB1-K7					.10 .20	NO NO		49	
A 481	4	48.00	56J10-59 56J21-40					.10 .10	NO NO		49, 82 49	
A 482	77	48.00									32 32	
A 482R			56J10-32 56J21-80					.10 .10	NO NO		49 49	A
A 482Y			56E23 56J21-81					.20 .10	NO NO		28 49	A
A 483	77	48.00									32 32	
A 483R			56J10-17 56J21-6					.10 .10	NO NO		49 49	A
A 483Y			56E23 56J21-7					.20 .10	NO NO		 49	A
A 484	77	48.00									32 32	
A 484R			56J10-18 56J21-214					.10 .10	NO NO		49 49	A

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CODE IDENT NO.
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SCALE-NONE
REV LTR C
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MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM.JKT AREA NO.	STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 484Y			56E23 56J21-215					.20 .10	NO NO		 49	A
A 485	77	48.00									32 32	
A 485R			56J10-40 56J21-179					.10 .10	NO NO		49 49	A
A 485Y			56E23 56J21-180					.20 .10	NO NO		 49	A
A 486	77	48.00									32 32	
A 486R			56J10-41 56J21-146					.10 .10	NO NO		49 49	A
A 486Y			56E23 56J21-147					.20 .10	NO NO		 49	A
A 487	77	48.00									32 32	
A 487R			56J10-19 56J21-113					.10 .10	NO NO		49 49	A
A 487Y			56E23 56J21-114					.20 .10	NO NO		 49	A
A 488	77	48.00									32 32	
A 488R			56J10-33 56J21-45					.10 .10	NO NO		49 49	A

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LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM.JKT AREA NO.	STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 488Y			56E23 56J21-46					.20 .10	NO NO		 49	A
A 489	77	48.00									32 32	
A 489R			56J10-44 56J21-8					.10 .10	NO NO		49 49	A
A 489Y			56E24 56J21-9					.20 .10	NO NO		 49	A
A 490	77	48.00									32 32	
A 490R			56J10-43 56J21-216					.10 .10	NO NO		49 49	A
A 490Y			56E24 56J21-217					.20 .10	NO NO		 49	A
A 491	77	48.00									32 32	
A 491R			56J10-53 56J21-181					.10 .10	NO NO		49 49	A
A 491Y			56E24 56J21-182					.20 .10	NO NO		 49	A
A 492	77	48.00									32 32	
A 492R			56J10-51 56J21-148					.10 .10	NO NO		49 49	A

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LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM.JKT AREA NO.	STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 492Y			56E24 56J21-149					.20 .10	NO NO		 49	A
A 493	77	48.00									32 32	
A 493R			56J10-64 56J21-115					.10 .10	NO NO		49 49	A
A 493Y			56E24 56J21-116					.20 .10	NO NO		 49	A
A 494	77	48.00									32 32	
A 494R			56J10-73 56J21-210					.10 .10	NO NO		49 49	A
A 494Y			56E22 56J21-211					.20 .10	NO NO		28 49	A
A 495	77	48.00									32 32	
A 495R			56J10-74 56J21-175					.10 .10	NO NO		49 49	A
A 495Y			56E22 56J21-176					.20 .10	NO NO		 49	A
A 496	77	48.00									32 32	
A 496R			56J10-60 56J21-142					.10 .10	NO NO		49 49	A

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LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 496Y			56E22 56J21-143					.20 .10	NO NO		28 49	A
A 497	77	48.00									32 32	
A 497R			56J10-28 56J21-109					.10 .10	NO NO		49 49	A
A 497Y			56E22 56J21-110					.20 .10	NO NO		 49	A
A 498	77	48.00									32 32	
A 498R			56J10-29 56J21-76					.10 .10	NO NO		49 49	A
A 498Y			56E22 56J21-77					.20 .10	NO NO		 49	A
A 499	77	48.00									32 32	
A 499R			56J10-30 56J21-41					.10 .10	NO NO		49 49	A
A 499Y			56E22 56J21-42					.20 .10	NO NO		 49	A
A 500	77	48.00									32 32	
A 500R			56J10-61 56J21-212					.10 .10	NO NO		49 49	A

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LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 500Y			56E22 56J21-213					.20 .10	NO NO		 49	A
A 501	77	48.00									32 32	
A 501R			56J10-62 56J21-177					.10 .10	NO NO		49 49	A
A 501Y			56E22 56J21-178					.20 .10	NO NO		 49	A
A 502	77	48.00									32 32	
A 502R			56J10-63 56J21-144					.10 .10	NO NO		49 49	A
A 502Y			56E22 56J21-145					.20 .10	NO NO		 49	A
A 503	77	48.00									32 32	
A 503R			56J10-14 56J21-111					.10 .10	NO NO		49 49	A
A 503Y			56E23 56J21-112					.20 .10	NO NO		 49	A
A 504	77	48.00									32 32	
A 504R			56J10-16 56J21-43					.10 .10	NO NO		49 49	A

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LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 504Y			56E23 56J21-44					.20 .10	NO NO		 49	A
A 505	77	48.00									32 32	
A 505R			56J10-31 56J21-4					.10 .10	NO NO		49 49	A
A 505Y			56E22 56J21-5					.20 .10	NO NO		 49	A
A 506	77	48.00									32 32	
A 506R			56J10-15 56J21-78					.10 .10	NO NO		49 49	A
A 506Y			56E23 56J21-79					.20 .10	NO NO		 49	A
A 507	4	49.00	56J10-8 56TB3-M22					.10 .20	NO NO		49, 82 65	
A 508	4	61.00	56J10-10 56TB1-G5					.10 .20	NO NO		49, 82 64	
A 509	4	48.00	56J10-58 56J21-39					.10 .10	NO NO		49, 82 49	
A 510	77	48.00									32 32	
A 510R			56J10-39 56J21-14					.10 .10	NO NO		49 49	B

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LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 510Y			56E25 56J21-15					.20 .10	NO NO		 49	B
A 511	77	48.00									32 32	
A 511R			56J10-37 56J21-117					.10 .10	NO NO		49 49	B
A 511Y			56E25 56J21-118					.20 .10	NO NO		 49	B
A 512	4	48.00	56J10-56 56J21-173					.10 .10	NO NO		49, 82 49	
A 513	4	48.00	56J10-55 56J21-174					.10 .10	NO NO		49, 82 49	
A 514	77	48.00									32 32	
A 514R			56J10-35 56J21-183					.10 .10	NO NO		49 49	B
A 514Y			56E25 56J21-184					.20 .10	NO NO		 49	B
A 515	77	48.00									32 32	
A 515R			56J10-47 56J21-185					.10 .10	NO NO		49 49	B
A 515Y			56E25 56J21-186					.20 .10	NO NO		 49	B

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MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 516	77	48.00									32 32	
A 516R			56J10-34 56J21-218					.10 .10	NO NO		49 49	B
A 516Y			56E25 56J21-219					.20 .10	NO NO		 49	B
A 517	77	48.00									32 32	
A 517R			56J10-48 56J21-220					.10 .10	NO NO		49 49	B
A 517Y			56E25 56J21-221					.20 .10	NO NO		 49	B
A 520	4	48.00	56J10-75 56J21-209					.10 .10	NO NO		49, 82 49	A
A 521	4	61.00	56J10-13 56TB1-K7					.10 .20	NO NO		49, 82 66	
A 522	4	48.00	56J10-45 56J21-10					.10 .10	NO NO		49, 82 49	B
A 523	4	48.00	56J10-46 56J21-11					.10 .10	NO NO		49, 82 49	B
A 548	4	12.00	56TB3-B20 56E12					.20 .20	NO NO		66	
A 549	4	55.00	56E20 56TB2-D6					.20 .20	NO NO		 66	

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A		1023055
SCALE-NONE	REV LTR C	SHEET 103 OF 120

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 550	4	49.00	56E21 56TB2-D5					.20 .20	NO NO			
A 551	4	12.00	56E25 56J10-69					.20 .10	NO NO		 49, 82	B
A 552	4	12.00	56E24 56J10-82					.20 .10	NO NO		 49, 82	A
A 554	4	12.00	56E23 56E22					.20 .20	NO NO			A
A 555	4	12.00	56E23 56E24					.20 .20	NO NO			A
A 556	4	40.00	56E19 56TB1-S7					.20 .20	NO NO		 64	
A 557	4	40.00	56E8 56TB2-D1					.20 .20	NO NO		 64	
A 558	77	40.00									32 32	
A 558R			56E14 56TB2-K1					.20 .20	NO NO		 66	
A 558Y			56E13 56TB2-L1					.20 .20	NO NO		 66	
A 559	4	12.00	56TB3-S21 56E6					.20 .20	NO NO		65	
A 560	77	40.00									32 32	

SIZE	CODE IDENT NO.	
A	80230	1023055
SCALE-NONE	REV LTR C	SHEET 104 OF 120

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 560R			56E17 56TB1-H7					.20 .20	NO NO		 65	
A 560Y			56E16 56TB1-G7					.20 .20	NO NO		 65	
A 561	77	40.00									32 32	
A 561R			56E9 56TB1-S1					.20 .20	NO NO		 65	
A 561Y			56E10 56TB1-S2					.20 .20	NO NO			
A 564	77	40.00									32 32	
A 564R			56E3 56TB1-G4					.20 .20	NO NO		 65	
A 564Y			56E4 56TB1-H4					.20 .20	NO NO		 65	
A 565	4	50.00	56J8-50 56TB1-F1					.10 .20	NO NO		49, 82 65	
A 566	4	18.00	56E44 56E57					.20 .20	NO NO			
A 567	77	47.00									32 32	
A 567R			56E7 56TB3-D2					.20 .20	NO NO		27 65	

SIZE	CODE IDENT NO.	
A		1023055
SCALE-NONE	REV LTR C	SHEET 105 OF 120

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 567Y			56E11 56TB3-C3					.20 .20	NO NO		 66	
A 568	4	12.00	56J21-187 56E64					.10 .20	NO NO		49	
A 569	4	12.00	56E82 56E65					.20 .20	NO NO			
A 570	4	12.00	56E82 56E62					.20 .20	NO NO		31, 81	
A 571	4	12.00	56J21-107 56E63					.10 .20	NO NO		49	
A 572	77	12.00									32 32	
A 572R			56J1-1 56E1					.10 .20	NO NO		49 28	
A 572Y			56J1-14 56E2					.10 .20	NO NO		49 27	
A 573	78	12.00									32 32	
A 573G			56J1-11 56E1					.10 .20	NO NO		49	
A 573R			56J1-25 56E1					.10 .20	NO NO		49	
A 573Y			56J1-12 56E5					.10 .20	NO NO		49 27	

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SCALE-NONE	REV LTR / A	SHEET 106 OF 120

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	LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A	574	77	12.00									32 32	
A	574R			56J2-1 56E1					.10 .20	NO NO		49	
A	574Y			56J2-14 56E2					.10 .20	NO NO		49	
A	575	78	12.00									32 32	
A	575G			56J2-11 56E1					.10 .20	NO NO		49	
A	575R			56J2-25 56E1					.10 .20	NO NO		49	
A	575Y			56J2-12 56E5					.10 .20	NO NO		49	
A	576	78	12.00									32 32	
A	576G			56J3-11 56E1					.10 .20	NO NO		49	
A	576R			56J3-25 56E1					.10 .20	NO NO		49	
A	576Y			56J3-12 56E5					.10 .20	NO NO		49	
A	577	78	40.00									32 32	

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	LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A	577G			56E5 56TB2-H5					.20 .20	NO NO		 64	
A	577R			56E1 56TB2-G4					.20 .20	NO NO		 66	
A	577Y			56E2 56TB2-H4					.20 .20	NO NO		 65	
A	578	77	12.00									32 32	
A	578R			56J1-3 56E7					.10 .20	NO NO		49	
A	578Y			56J1-2 56E11					.10 .20	NO NO		49 27	
A	579	77	12.00									32 32	
A	579R			56J2-3 56E7					.10 .20	NO NO		49	
A	579Y			56J2-2 56E11					.10 .20	NO NO		49	
A	580	77	12.00									32 32	
A	580R			56J3-3 56E7					.10 .20	NO NO		49	
A	580Y			56J3-2 56E11					.10 .20	NO NO		49	

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SERIES 0 SPARE 1023055 C

	LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A	581	4	12.00	56J3-16 56E6					.10 .20	NO NO		49, 82	
A	582	4	12.00	56J3-15 56E8					.10 .20	NO NO		49, 82	
A	583	77	12.00									32 32	
A	583R			56J5-50 56E17					.10 .20	NO NO		49	
A	583Y			56J5-60 56E16					.10 .20	NO NO		49	
A	584	78	12.00									32 32	
A	584G			56J4-12 56E14					.10 .20	NO NO		49	
A	584R			56J4-25 56E13					.10 .20	NO NO		49 28	
A	584Y			56J4-11 56E13					.10 .20	NO NO		49	
A	585	78	12.00									32 32	
A	585G			56J5-17 56E14					.10 .20	NO NO		49	
A	585R			56J5-4 56E13					.10 .20	NO NO		49	

SIZE A | CODE IDENT NO. | 1023055

SCALE-NONE | REV LTR C | SHEET 109 OF 120

MIL 2084 4-63

SERIES 0 SPARE 1023055

	LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A	585Y			56J5-18 56E13					.10 .20	NO NO		49	
A	586	77	12.00									32 32	
A	586R			56J5-1 56E14					.10 .20	NO NO		49	
A	586Y			56J5-14 56E13					.10 .20	NO NO		49	
A	587	4	6.00	56TB1-N4 56TB1-N5					.20 .20	NO NO		66	
A	588	4	6.00	56TB1-N5 56TB1-N8					.20 .20	NO NO		66	
A	591	4	6.00	56TB3-T3 56TB3-R3					.20 .20	NO NO		66	
A	592	4	6.00	56TB3-R3 56TB3-N3					.20 .20	NO NO		66	
A	593	4	6.00	56TB3-D15 56TB3-L20					.20 .20	NO NO		66 65	
A	594	4	6.00	56TB3-L22 56TB3-D15					.20 .20	NO NO		65	
A	595	4	6.00	56TB3-K20 56TB3-C15					.20 .20	NO NO		65	
A	596	4	6.00	56TB3-K22 56TB3-C15					.20 .20	NO NO		65 66	

MANNED SPACECRAFT CENTER HOUSTON, TEXAS | SIZE A | 1023055

SCALE-NONE | REV LTR / A | SHEET 110 OF 120

MIL 2084 4-63

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 598	77	47.00									32 32	
A 598R			56P5-D 56TB2-U2					.20 .20	NO NO		52 65	
A 598Y			56P5-E 56TB2-T3					.20 .20	NO NO		52 65	
A 599	77	39.00									32 32	
A 599R			56J4-3 56TB2-U1					.10 .18	NO NO		49	
A 599Y			56J4-2 56TB2-T2					.10 .20	NO NO		49	
A 600	77	41.00									32 32	
A 600R			56J5-3 56TB2-U1					.10 .20	NO NO		49 65	
A 600Y			56J5-2 56TB2-T2					.10 .20	NO NO		49 66	
A 601	4	6.00	56TB2-L4 56TB2-M4					.20 .20	NO NO		66 65	
A 602	75	48.00									31 31	
A 602G			56P1-106 56TB1-N1					.10 .20	NO NO		49	

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SCALE-NONE
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SHEET 111 OF 120

MIL 2084 4-63

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 602N			56P1-90 56TB1-M1					.10 .20	NO NO		49	
A 602R			56P1-103 56TB1-R1					.10 .20	NO NO		49	
A 602Y			56P1-1C8 56TB1-T1					.10 .20	NO NO		49 66	
A 603	75	50.00									31 31	
A 603G			56J8-46 56TB1-R3					.10 .20	NO NO		49	
A 603N			56J8-19 56TB1-R2					.10 .20	NO NO		49	
A 603R			56J8-55 56TB1-N3					.10 .20	NO NO		49	
A 603Y			56J8-36 56TB1-R2					.10 .20	NO NO		49	
A 604	73	53.00									32 32	
A 604R			56J9-55 56TB1-N3					.10 .20	NO NO		49 65	
A 604Y			56J9-46 56TB1-R3					.10 .20	NO NO		49 65	
A 605	75	53.00									31 31	

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SCALE-NONE
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SHEET 112 OF 120

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LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 605G			56J9-64 56TB1-N1					.10 .20	NO NO		49 65	
A 605N			56J9-63 56TB1-M1					.10 .20	NO NO		49 65	
A 605R			56J9-54 56TB1-R1					.10 .20	NO NO		49 65	
A 605Y			56J9-84 56TB1-K1					.10 .20	NO NO		49 65	
A 606	75	42.00									31 31	
A 6C6G			56J9-53 56P10-107					.10 .10	NO NO		49 49	
A 606N			56J9-52 56P10-108					.10 .10	NO NO		49 49	
A 6C6R			56J9-61 56P10-106					.10 .10	NO NO		49 49	
A 606Y			56J9-62 56P10-93					.10 .10	NO NO		49 49	
A 607	73	42.00									32 32	
A 607R			56P10-69 56TB3-L14					.10 .20	NO NO		49	
A 607Y			56P10-68 56TB3-K14					.10 .20	NO NO		49	

MANNED SPACECRAFT CENTER
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SCALE-NONE
REV LTR A
SHEET 113 OF 120

MIL 2084 4-63

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 608	73	28.00									32 32	
A 608R			56P11-N 56TB3-L14					.25 .20	NO NO		53 65	
A 608Y			56P11-K 56TB3-K14					.25 .20	NO NO		53 65	
A 609	5	28.00	56P11-B 56TB3-C20					.25 .20	NO NO		53, 82	
A 610	5	28.00	56P11-B 56TB3-C20					.25 .20	NO NO		82	
A 611	5	28.00	56P11-B 56TB3-C20					.25 .20	NO NO		82 66	
A 612	5	28.00	56P11-C 56TB3-C21					.25 .20	NO NO		53, 82	
A 613	5	28.00	56P11-C 56TB3-C21					.25 .20	NO NO		82	
A 614	5	28.00	56P11-C 56TB3-C21					.25 .20	NO NO		82 66	
A 615	5	28.00	56P12-B 56TB3-D20					.25 .20	NO NO		53, 82	
A 616	5	28.00	56P12-B 56TB3-D20					.25 .20	NO NO		82	
A 617	5	28.00	56P12-B 56TB3-D20					.25 .20	NO NO		82 66	

SIZE A
CODE IDENT NO.
1023055
SCALE-NONE
REV LTR C
SHEET 114 OF 120

MIL 2084 9-65

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 618	5	28.00	56P12-C 56TB3-D21					.25 .20	NO NO		53, 82	
A 619	5	28.00	56P12-C 56TB3-D21					.25 .20	NO NO		82	
A 620	5	28.00	56P12-C 56TB3-D21					.25 .20	NO NO		82 66	
A 621	5	28.00	56P12-M 56TB3-C22					.25 .20	NO NO		53, 82	
A 622	5	28.00	56P12-M 56TB3-C22					.25 .20	NO NO		82 65	
A 623	5	28.00	56P11-M 56TB3-D22					.25 .20	NO NO		53, 82	
A 624	5	28.00	56P11-M 56TB3-D22					.25 .20	NO NO		82 65	
A 625	5	28.00	56P11-H 56TB3-H21					.25 .20	NO NO		53, 82	
A 626	5	28.00	56P11-H 56TB3-H21					.25 .20	NO NO		82	
A 627	5	28.00	56P11-H 56TB3-H21					.25 .20	NO NO		82 66	
A 628	5	28.00	56P12-H 56TB3-H22					.25 .20	NO NO		53, 82	
A 629	5	28.00	56P12-H 56TB3-H22					.25 .20	NO NO		82	

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 630	5	28.00	56P12-M 56TB3-M22					.25 .20	NO NO		82 66	
A 631	5	28.00	56P11-L 56TB3-F21					.25 .20	NO NO		53, 82 66	
A 632	5	28.00	56P12-L 56TB3-F22					.25 .20	NO NO		53, 82 66	
A 633	5	28.00	56P11-A 56TB3-G21					.25 .20	NO NO		53, 82 64	
A 634	5	35.00	56P11-A 56J21-1					.25 .10	NO NO		82 49	
A 635	5	35.00	56P11-A 56J21-73					.25 .10	NO NO		82 49	
A 636	5	28.00	56P12-A 56TB3-G22					.25 .20	NO NO		53, 82 64	
A 637	5	35.00	56P12-A 56J21-139					.25 .10	NO NO		82 49	
A 638	5	35.00	56P12-A 56J21-207					.25 .10	NO NO		82 49	
A 639	5	35.00	56P11-J 56J21-2					.25 .10	NO NO		53, 82 49	
A 640	5	35.00	56P11-J 56J21-74					.25 .10	NO NO		82 49	
A 641	5	35.00	56P12-J 56J21-140					.25 .10	NO NO		53, 82 49	

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 642	5	35.00	56P12-J 56J21-208					.25 .10	NO NO		82 49	
A 643	5	28.00	56P11-G 56TB3-D15					.25 .20	NO NO		53, 82	
A 644	5	28.00	56P11-G 56TB3-K20					.25 .20	NO NO		82	
A 645	5	28.00	56P11-G 56TB3-L21					.25 .20	NO NO		82 65	
A 646	5	28.00	56P12-G 56TB3-C15					.25 .20	NO NO		53, 82	
A 647	5	28.00	56P12-G 56TB3-K22					.25 .20	NO NO		82	
A 648	5	28.00	56P12-G 56TB3-L20					.25 .20	NO NO		82	
A 649	5	39.00	56P11-D 56TB1-N8					.25 .20	NO NO		53, 82	
A 650	5	39.00	56P11-D 56TB1-S6					.25 .20	NO NO		82	
A 651	5	35.00	56P11-F 56TB2-M3					.25 .20	NO NO		53, 82 64	
A 652	5	35.00	56P11-F 56TB2-D4					.25 .20	NO NO		82 65	
A 653	5	28.00	56P11-F 56TB3-N3					.25 .20	NO NO		82	

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 654	5	35.00	56P11-E 56TB2-M7					.25 .20	NO NO		53, 82 64	
A 655	5	35.00	56P11-E 56TB2-V4					.25 .20	NO NO		82	
A 656	5	39.00	56P12-D 56TB1-N4					.25 .20	NO NO		53, 82	
A 657	5	28.00	56P12-D 56TB3-S3					.25 .20	NO NO		82	
A 658	5	28.00	56P12-E 56TB3-T3					.25 .20	NO NO		53, 82	
A 659	5	39.00	56P12-E 56TB1-S3					.25 .20	NO NO		82	
A 660	5	35.00	56P12-F 56TB2-M1					.25 .20	NO NO		53, 82 64	
A 661	5	35.00	56P12-F 56TB2-L4					.25 .20	NO NO		82	
A 662	5	39.00	56P12-F 56TB1-D7					.25 .20	NO NO		82	
A 663	74	54.00									32 32	
A 663G			56P10-81 56TB1-T2					.10 .20	NO NO		49 66	
A 663R			56P10-94 56TB1-R2					.10 .20	NO NO		49 66	

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 663Y			56P10-95 56TB1-S2					.10 .20	NO NO		49 66	
A 664	4	6.00	56TB3-B15 56TB3-T15					.20 .20	NO NO		65	
A 665	4	42.00	56P10-1 56TB3-B20					.10 .20	NO NO		49, 82	
A 667	4	40.00	56J9-15 56TB3-F1					.10 .18	NO NO		49, 82 65	
A 668	4	40.00	56J9-14 56TB3-F2					.10 .18	NO NO		49, 82 64	
A 669	77	49.00									32 32	
A 669R			56J9-96 56TB2-U3					.10 .18	NO NO		49 66	
A 669Y			56J9-82 56TB2-U2					.10 .18	NO NO		49	
A 670	77	40.00									32 32	
A 670R			56J9-49 56TB3-B16					.10 .18	NO NO		49	
A 670Y			56J9-38 56TB3-B17					.10 .18	NO NO		49	
A 671	1	40.00			1.00 2.50	.75 2.25					32 32, 28	

LEAD IDENT	WIRE MATL ITEM	LEAD LG	CIRCUIT PT FROM (A) TO (B)	TERM. AREA NO.	JKT STRIP LG	SHLD STRIP LG	LEAD CUT LG	INS STRIP LG	TIN	NOTE ONE, FIG	ACCESSORY ITEMS	REMARKS
A 671B	76	12.00	56TB3-F8 SHLD A671					.20 .20	NO NO		65	
A 671Y			56J9-48 56TB3-G8					.10 .18	NO NO		49 64	
A 672	1	40.00			1.00 2.50	.75 2.25					32 32, 28	
A 672B	76	12.00	56TB3-F7 SHLD A672					.20 .20	NO NO		65	
A 672Y			56J9-56 56TB3-G7					.10 .18	NO NO		49 64	
A 673	4	40.00	56J9-47 56TB3-A10					.10 .18	NO NO		49, 82 64	

APPLICATION	
NEXT ASSY	USED ON

REVISIONS

SYM	DESCRIPTION	DATE	APPROVAL
A	INITIAL RELEASE CLASS A PER TDRR 26651	9 FEB 66	

SEE SHEET 2 FOR REVISION RECORD

REV																								
SHEET																								
REV STATUS OF SHEETS	REV																							
	SHEET																							

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

AC SPARK PLUG DIVISION, GMC
MILWAUKEE, WISCONSIN

ACSP PN

DRAWN [illegible] DATE 8-29-65
CHECKED A. Anderson [illegible]
APPROVAL [illegible] FEB 23 [illegible]
APPROVAL
NASA APPROVAL A. C. METZGER
MIT APPROVAL [illegible]
CONTRACT

INTERCONNECTION LIST OF AGE INTERCONNECT HARNESS AND PSA END CONNECTOR

CODE IDENT NO. | SIZE A | 1023058 | REV A
SCALE — | SHEET 1 OF 141

REVISION STATUS OF SHEETS

SH	REV	SH	REV	SH	REV	SH	REV	SH	REV	SH	REV	SH	REV	SH	REV
1	A	37	A	73	A	109	A								
2	A	38	A	74	A	110	A								
3	A	39	A	75	A	111	A								
4	A	40	A	76	A	112	A								
5	A	41	A	77	A	113	A								
6	A	42	A	78	A	114	A								
7	A	43	A	79	A	115	A								
8	A	44	A	80	A	116	A								
9	A	45	A	81	A	117	A								
10	A	46	A	82	A	118	A								
11	A	47	A	83	A	119	A								
12	A	48	A	84	A	120	A								
13	A	49	A	85	A	121	A								
14	A	50	A	86	A	122	A								
15	A	51	A	87	A	123	A								
16	A	52	A	88	A	124	A								
17	A	53	A	89	A	125	A								
18	A	54	A	90	A	126	A								
19	A	55	A	91	A	127	A								
20	A	56	A	92	A	128	A								
21	A	57	A	93	A	129	A								
22	A	58	A	94	A	130	A								
23	A	59	A	95	A	131	A								
24	A	60	A	96	A	132	A								
25	A	61	A	97	A	133	A								
26	A	62	A	98	A	134	A								
27	A	63	A	99	A	135	A								
28	A	64	A	100	A	136	A								
29	A	65	A	101	A	137	A								
30	A	66	A	102	A	138	A								
31	A	67	A	103	A	139	A								
32	A	68	A	104	A	140	A								
33	A	69	A	105	A	141	A								
34	A	70	A	106	A										
35	A	71	A	107	A										
36	A	72	A	108	A										

MANNED
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HOUSTON, TEXAS

REVISION A

NASA DRAWING NO.
1023058
SHEET 2 OF 141

FROM TO COND NO CIRCUIT FUNCTION

GENERAL NOTES

PARTIAL CIRCUIT POINTS ARE SHOWN. PREFIX WITH UNIT NUMBER 56 FOR COMPLETE CIRCUIT POINT.

MANNED
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SCALE-NONE | REV LTR A | SHEET 3 OF 141

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FROM        TO          COND NO   C I R C U I T   F U N C T I O N

E  1        J13-C6       CC342  STRUCTURE GROUND

E  2        TB1-K 4      CC341  STRUCTURE GROUND

E  3        TB1-K70      CC343  STRUCTURE GROUND

E  4        SHLD CC   1 CC   1A 0 VDC IMU
E  4        SHLD CC   2 CC   2A 0 VDC IMU
E  4        SHLD CC   6 CC   6A 0 VDC IMU
E  4        SHLD CC   7 CC   7A 0 VDC IMU
E  4        SHLD BB  94 BB  94B 0 VDC IMU
E  4        J11-P2        CC 79  0 VDC IMU

E  5        J23-  6      CC 11W 0 VDC IMU                          139R
E  5        J23-  1      CC 12W 0 VDC IMU                          140R
E  5        J13-R6       CC102  0 VDC IMU

E  6        J23- 10      CC 13W 0 VDC IMU                          142S
E  6        J23- 24      CC 14W 0 VDC IMU                          143S
E  6        J23- 56      CC 15W 0 VDC IMU                          144S
E  6        J23- 33      CC 16W 0 VDC IMU                          145S
E  6        J23- 16      CC 17W 0 VDC IMU                          146S
E  6        J23-  5      CC 18W 0 VDC IMU                          147S
E  6        J23- 44      CC 19W 0 VDC IMU                          148S
E  6        E  7         CC338  0 VDC IMU
E  6        J14-R6       CC110  0 VDC IMU

E  7        SHLD CC 13 CC 13A 0 VDC IMU
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MANNED
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(CONT.)

FROM	TO	COND NO	CIRCUIT FUNCTION	
E 7	SHLD CC 14	CC 14A	0 VDC IMU	
E 7	SHLD CC 15	CC 15A	0 VDC IMU	
E 7	SHLD CC 16	CC 16A	0 VDC IMU	
E 7	SHLD CC 17	CC 17A	0 VDC IMU	
E 7	SHLD CC 18	CC 18A	0 VDC IMU	
E 7	SHLD CC 19	CC 19A	0 VDC IMU	
E 7	E 6	CC338	0 VDC IMU	
E 8	J24- 22	CC 26R	IG DAC MDA SIG LO	120R
E 8	J24- 42	CC 27W	IG DAC MDA SIG LO	121R
E 8	J15-A5	CC120	IG DAC MDA SIG LO	
E 9	J23- 23	CC 32R	IG DAC MDA SIG LO	128R
E 9	J23- 69	CC 33W	IG DAC MDA SIG LO	129R
E 9	SHLD CC 32	CC 32A	IG DAC MDA SIG LO	
E 9	SHLD CC 33	CC 33A	IG DAC MDA SIG LO	
E 9	J15-A5	CC123	IG DAC MDA SIG LO	
E 10	J24- 18	CC 28R	MG DAC MDA SIG LO	122R
E 10	J24- 7	CC 29W	MG DAC MDA SIG LO	123R
E 10	J15-A7	CC121	MG DAC MDA SIG LO	
E 11	J23- 34	CC 34R	MG DAC MDA SIG LO	130R
E 11	J23- 17	CC 35W	MG DAC MDA SIG LO	131R
E 11	SHLD CC 34	CC 34A	MG DAC MDA SIG LO	
E 11	SHLD CC 35	CC 35A	MG DAC MDA SIG LO	
E 11	J15-A7	CC124	MG DAC MDA SIG LO	

(CONT.)

FROM	TO	COND NO	CIRCUIT FUNCTION	
E 12	J24- 20	CC 30R	OG DAC MDA SIG LO	118R
E 12	J24- 21	CC 31W	OG DAC MDA SIG LO	119R
E 12	J15-A9	CC122	OG DAC MDA SIG LO	
E 13	J23- 8	CC 36R	OG DAC MDA SIG LO	126R
E 13	J23- 9	CC 37W	OG DAC MDA SIG LO	127R
E 13	SHLD CC 36	CC 36A	OG DAC MDA SIG LO	
E 13	SHLD CC 37	CC 37A	OG DAC MDA SIG LO	
E 13	J15-A9	CC125	OG DAC MDA SIG LO	
E 14	J24- 9	CC 20W	COMPUTER RET	132S
E 14	J24- 23	CC 21W	COMPUTER RET	133S
E 14	J15-L5	CC114	COMPUTER RET	
E 15	J24- 43	CC 22W	COMPUTER RET	134S
E 15	J24- 69	CC 23W	COMPUTER RET	135S
E 15	J15-L5	CC115	COMPUTER RET	
E 16	J24- 34	CC 24W	COMPUTER RET	137S
E 16	J24- 57	CC 25W	COMPUTER RET	136S
E 16	J15-L5	CC116	COMPUTER RET	
E 17	SHLD CC 20	CC 20B	AGC SIGNAL 179 SHIELD RETURN	
E 17	SHLD CC 21	CC 21B	AGC SIGNAL 179 SHIELD RETURN	
E 17	SHLD CC 22	CC 22B	AGC SIGNAL 179 SHIELD RETURN	
E 17	SHLD CC 23	CC 23B	AGC SIGNAL 179 SHIELD RETURN	
E 17	SHLD CC 24	CC 24B	AGC SIGNAL 179 SHIELD RETURN	

(CONT.)

FROM	TO	COND NO	CIRCUIT FUNCTION	
E 17	SHLD CC 25	CC 25B	AGC SIGNAL 179 SHIELD RETURN	
E 17	E 18	CC339	AGC SIGNAL 179 SHIELD RETURN	
E 18	SHLD CC 8	CC 8B	AGC SIGNAL 179 SHIELD RETURN	
E 18	SHLD CC 9	CC 9B	AGC SIGNAL 179 SHIELD RETURN	
E 18	SHLD CC 10	CC 10B	AGC SIGNAL 179 SHIELD RETURN	
E 18	J24- 87	CC336	AGC SIGNAL 179 SHIELD RETURN	179
E 18	E 17	CC339	AGC SIGNAL 179 SHIELD RETURN	
E 19	SHLD CC 26	CC 26B	AGC SIGNAL 179 SHIELD RETURN	
E 19	SHLD CC 27	CC 27B	AGC SIGNAL 179 SHIELD RETURN	
E 19	SHLD CC 28	CC 28B	AGC SIGNAL 179 SHIELD RETURN	
E 19	SHLD CC 29	CC 29B	AGC SIGNAL 179 SHIELD RETURN	
E 19	SHLD CC 30	CC 30B	AGC SIGNAL 179 SHIELD RETURN	
E 19	SHLD CC 31	CC 31B	AGC SIGNAL 179 SHIELD RETURN	
E 19	E 20	CC340	AGC SIGNAL 179 SHIELD RETURN	
E 20	SHLD CC 42	CC 42B	AGC SIGNAL 179 SHIELD RETURN	
E 20	SHLD CC 46	CC 46B	AGC SIGNAL 179 SHIELD RETURN	
E 20	SHLD CC 49	CC 49B	AGC SIGNAL 179 SHIELD RETURN	
E 20	SHLD CC 50	CC 50B	AGC SIGNAL 179 SHIELD RETURN	
E 20	J24- 64	CC337	AGC SIGNAL 179 SHIELD RETURN	179
E 20	E 19	CC340	AGC SIGNAL 179 SHIELD RETURN	
E 21	SHLD CC 38	CC 38B	AGC SIGNAL 178 SHIELD RETURN	
E 21	SHLD CC 41	CC 41B	AGC SIGNAL 178 SHIELD RETURN	
E 21	E 22	CC344	AGC SIGNAL 178 SHIELD RETURN	
E 21	E 23	CC345	AGC SIGNAL 178 SHIELD RETURN	
E 21	SHLD CC332	CC332A	AGC SIGNAL 178 SHIELD RETURN	

(CONT.)

FROM	TO	COND NO	CIRCUIT FUNCTION	
E 22	SHLD A 114	A 114B	AGC SIGNAL 178 SHIELD RETURN	
E 22	SHLD A 131	A 131B	AGC SIGNAL 178 SHIELD RETURN	
E 22	SHLD A 132	A 132B	AGC SIGNAL 178 SHIELD RETURN	
E 22	SHLD A 133	A 133B	AGC SIGNAL 178 SHIELD RETURN	
E 22	SHLD A 136	A 136B	AGC SIGNAL 178 SHIELD RETURN	
E 22	E 21	CC344	AGC SIGNAL 178 SHIELD RETURN	
E 23	SHLD A 304	A 304B	AGC SIGNAL 178 SHIELD RETURN	
E 23	SHLD A 309	A 309B	AGC SIGNAL 178 SHIELD RETURN	
E 23	SHLD A 414	A 414B	AGC SIGNAL 178 SHIELD RETURN	
E 23	SHLD A 417	A 417B	AGC SIGNAL 178 SHIELD RETURN	
E 23	J24- 51	A 565	AGC SIGNAL 178 SHIELD RETURN	178
E 23	SHLD A 566	A 566A	AGC SIGNAL 178 SHIELD RETURN	
E 23	E 21	CC345	AGC SIGNAL 178 SHIELD RETURN	
E 24	SHLD A 298	A 298A	AGC SIGNAL 178 SHIELD RETURN	
E 24	SHLD A 301	A 301A	AGC SIGNAL 178 SHIELD RETURN	
E 24	SHLD A 308	A 308A	AGC SIGNAL 178 SHIELD RETURN	
E 24	SHLD A 309	A 309A	AGC SIGNAL 178 SHIELD RETURN	
E 26	J21- 74	A 464Y	COMMONED RETURNS GROUND	202R
E 26	J21- 47	A 465Y	COMMONED RETURNS GROUND	210R
E 26	J21- 28	A 466Y	COMMONED RETURNS GROUND	201R
E 26	J21- 13	A 467Y	COMMONED RETURNS GROUND	208R
E 26	E 27	A 471	COMMONED RETURNS GROUND	
E 26	J10- 69	A 470	COMMONED RETURNS GROUND	252
E 27	J21- 15	A 459Y	COMMONED RETURNS GROUND	205R

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                         INTERCONNECT LIST          1023058              9
     FROM          TO         COND NO  C I R C U I T  F U N C T I O N
(CONT.)

     E 27          J21- 54    A 460Y COMMONED RETURNS GROUND              209R
     E 27          J21- 53    A 461Y COMMONED RETURNS GROUND              203R
     E 27          J21- 30    A 462Y COMMONED RETURNS GROUND              207R
     E 27          J21- 51    A 463Y COMMONED RETURNS GROUND              204R
     E 27          E 26       A 471  COMMONED RETURNS GROUND

     E 28          J21-  4    A 422Y COMMONED RETURNS GROUND              244R
     E 28          J21- 17    A 423Y COMMONED RETURNS GROUND              232R
     E 28          J21- 18    A 424Y COMMONED RETURNS GROUND              227R
     E 28          J21-  2    A 425Y COMMONED RETURNS GROUND              228R
     E 28          J21- 24    A 426Y COMMONED RETURNS GROUND              229R
     E 28          E 34       A 453  COMMONED RETURNS GROUND

     E 29          J21- 69    A 427Y COMMONED RETURNS GROUND              230R
     E 29          J21- 57    A 428Y COMMONED RETURNS GROUND              231R
     E 29          J21-  1    A 429Y COMMONED RETURNS GROUND              233R
     E 29          J21- 11    A 430Y COMMONED RETURNS GROUND              234R
     E 29          J21- 45    A 431Y COMMONED RETURNS GROUND              235R
     E 29          E 34       A 454  COMMONED RETURNS GROUND

     E 30          J21- 70    A 432Y COMMONED RETURNS GROUND              236R
     E 30          J21- 56    A 433Y COMMONED RETURNS GROUND              237R
     E 30          J21- 16    A 434Y COMMONED RETURNS GROUND              238R
     E 30          J21- 61    A 435Y COMMONED RETURNS GROUND              214R
     E 30          E 34       A 455  COMMONED RETURNS GROUND

     E 31          J21- 39    A 436Y COMMONED RETURNS GROUND              215R
     E 31          J21- 41    A 437Y COMMONED RETURNS GROUND              216R

                                        MANNED      | SIZE |
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                                        CENTER      |      |
                                    HOUSTON, TEXAS  |      |
                                    SCALE-NONE | REV LTR   A | SHEET 9  OF 141
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                         INTERCONNECT LIST          1023058              10
     FROM          TO         COND NO  C I R C U I T  F U N C T I O N
(CONT.)

     E 31          J21- 66    A 438Y COMMONED RETURNS GROUND              217R
     E 31          J21- 60    A 439Y COMMONED RETURNS GROUND              218R
     E 31          E 34       A 456  COMMONED RETURNS GROUND

     E 32          J21- 20    A 440Y COMMONED RETURNS GROUND              219R
     E 32          J21- 68    A 441Y COMMONED RETURNS GROUND              221R
     E 32          J21- 59    A 442Y COMMONED RETURNS GROUND              222R
     E 32          J21- 19    A 443Y COMMONED RETURNS GROUND              223R
     E 32          E 34       A 457  COMMONED RETURNS GROUND

     E 33          J21-  9    A 444Y COMMONED RETURNS GROUND              224R
     E 33          J21- 58    A 445Y COMMONED RETURNS GROUND              226R
     E 33          J21- 22    A 446Y COMMONED RETURNS GROUND              220R
     E 33          J21- 43    A 447Y COMMONED RETURNS GROUND              225R
     E 33          E 34       A 458  COMMONED RETURNS GROUND

     E 34          J10- 82    A 452  COMMONED RETURNS GROUND              330
     E 34          E 28       A 453  COMMONED RETURNS GROUND
     E 34          E 29       A 454  COMMONED RETURNS GROUND
     E 34          E 30       A 455  COMMONED RETURNS GROUND
     E 34          E 31       A 456  COMMONED RETURNS GROUND
     E 34          E 32       A 457  COMMONED RETURNS GROUND
     E 34          E 33       A 458  COMMONED RETURNS GROUND

     E 35          J21- 50    A 556  GROUP 3 SHIELD                       250

     E 36          E 48       A 487  GROUP 3 SHIELD                       250

     E 37          J21- 73    A 557  GROUP 2 SHIELD                       245

                                        MANNED      | SIZE |
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                                        CENTER      |      |
                                    HOUSTON, TEXAS  |      |
                                    SCALE-NONE | REV LTR   A | SHEET 10 OF 141
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                         INTERCONNECT LIST          1023058              11
     FROM          TO         COND NO  C I R C U I T  F U N C T I O N



     E 38          E 48       A 488  GROUP 2 SHIELD                       245


     E 48          E 36       A 487  GROUP 3 SHIELD                       250
     E 48          E 38       A 488  GROUP 2 SHIELD                       245

     J01-  1       TB1-A 8    A   1R 800 CPS 28 V 1 PCT HI IMU
     J01-  2       TB1-D 2    A   2Y 800 CPS 28 V 5 PCT L-90 DEG LO IMU
     J01-  3       TB1-D 1    A   2R 800 CPS 28 V 5 PCT L-90 DEG HI IMU
     J01-  6       TB1-A14    A   3Y COS AIG 1X RET P1
     J01-  7       TB1-A16    A   4Y SIN AIG 1X P2
     J01- 11       TB1-A 6    A   5G 800 CPS 28 V 1 PCT HI IMU
     J01- 12       TB1-B 6    A   5Y ZEROING RSVR 800 CPS
     J01- 14       TB1-B 8    A   1Y 800 CPS 28 V 1 PCT LO IMU
     J01- 15       TB1-B53    A   6  +28 VDC CDU NOT LOCK
     J01- 16       TB1-G 6    A   7  +28 VDC IMU
     J01- 20       TB1-A13    A   3R COS AIG 1X P3
     J01- 21       TB1-A15    A   4R SIN AIG 1X RET P4
     J01- 25       TB1-A 6    A   5R 800 CPS 28 V 1 PCT HI IMU
     J01- 28       TB1-A 1    A   8R 400 CPS VARIABLE ILLUMINATION POWER
     J01- 29       TB1-B 1    A   8Y 400 CPS 6 V LO
     J01- 30       TB1-C53    A   9  +28 VDC IMU FOR IG MDA
     J01- 31       TB1-K18    A  10G IG CDU MDA OUTPUT
     J01- 32       TB1-K19    A  10Y IG CDU MDA OUTPUT
     J01- 34       TB1-K35    A  11  IG CDU 1X RSVR LOAD S1
     J01- 35       TB1-K33    A  12R IG CDU 1X ERROR SIG S2
     J01- 41       TB1-G 9    A  13  STRUCTURE GROUND
     J01- 43       TB1-K20    A  10R 0 VDC IMU

                                        MANNED      | SIZE |
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                                        CENTER      |      |
                                    HOUSTON, TEXAS  |      |
                                    SCALE-NONE | REV LTR   A | SHEET 11 OF 141
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                         INTERCONNECT LIST          1023058              12
     FROM          TO         COND NO  C I R C U I T  F U N C T I O N
(CONT.)

     J01- 45       TB1-K34    A  12Y IG CDU ERROR SIG RET
     J01- 50       TB1-G 1    A  14R 25.6 KC HI IMU
     J01- 57       TB1-B31    A  15Y IG CDU 1/2X ERROR SIG LO
     J01- 60       TB1-G 2    A  14Y 25.6 KC LO IMU
     J01- 67       TB1-A31    A  15R IG CDU 1/2X ERROR SIG S3
     J01- 86       TB1-H16    A  16Y COS AIG 16X TO CDU
     J01- 87       TB1-K16    A  17Y SIN AIG 16X TO CDU
     J01- 90       TB1-K30    A  18Y IG CDU ERROR SIG RET
     J01- 92       TB1-F30    A  19Y IG CDU MDA INPUT RET
     J01- 94       TB1-F34    A  20Y IG CDU ENCODER COMMON
     J01-100       TB1-H15    A  16R COS AIG 16X S3
     J01-101       TB1-K15    A  17R SIN AIG 16X S4
     J01-104       TB1-K31    A  18R IG CDU 16X ERROR SIG
     J01-105       TB1-F31    A  19G IG CDU MDA SLEW SIG
     J01-106       TB1-F29    A  19R IG CDU MDA TACH SIG
     J01-107       TB1-F35    A  20G IG CDU ENCODER PHASE 1
     J01-108       TB1-F33    A  20R IG CDU ENCODER PHASE 2

     J02-  1       TB1-A 8    A  21R 800 CPS 28 V 1 PCT HI IMU
     J02-  2       TB1-D 2    A  22Y 800 CPS 28 V 5 PCT L-90 DEG LO IMU
     J02-  3       TB1-D 1    A  22R 800 CPS 28 V 5 PCT L-90 DEG HI IMU
     J02-  6       TB1-B14    A  23Y COS AMG 1X S1
     J02-  7       TB1-B16    A  24Y SIN AMG 1X
     J02- 11       TB1-A 5    A  25G 800 CPS 28 V 1 PCT HI IMU
     J02- 12       TB1-B 6    A  25Y ZEROING RSVR 800 CPS
     J02- 14       TB1-B 8    A  21Y 800 CPS 28 V 1 PCT LO IMU
     J02- 15       TB1-B53    A  26  +28 VDC CDU NOT LOCK
     J02- 16       TB1-G 6    A  27  +28 VDC IMU
     J02- 20       TB1-B13    A  23R COS AMG 1X S3
     J02- 21       TB1-B15    A  24R SIN AMG 1X RET
     J02- 25       TB1-A 5    A  25R 800 CPS 28 V 1 PCT HI IMU

                                        MANNED      | SIZE |
                                      SPACECRAFT    |  A   |      1023058
                                        CENTER      |      |
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(CONT.)

FROM	TO	COND	NO	CIRCUIT FUNCTION
J02- 28	TB1-A 1	A	28R	400 CPS VARIABLE ILLUMINATION POWER
J02- 29	TB1-B 1	A	28Y	400 CPS 6 V LO
J02- 30	TB1-C52	A	29	+28 VDC IMU FOR MG MDA
J02- 31	TB1-H19	A	30G	MG CDU MDA OUTPUT
J02- 32	TB1-H18	A	30Y	MG CDU MDA OUTPUT
J02- 34	TB1-H35	A	31	MG CDU 1X RSVR LOAD
J02- 35	TB1-H33	A	32R	MG CDU 1X ERROR SIG
J02- 41	TB1-G 9	A	33	STRUCTURE GROUND
J02- 43	TB1-H20	A	30R	0 VDC IMU
J02- 45	TB1-H34	A	32Y	MG CDU ERROR SIG RET
J02- 50	TB1-G 1	A	34R	25.6 KC HI IMU
J02- 57	TB1-B30	A	35Y	MG CDU 1/2X ERROR SIG LO
J02- 60	TB1-G 2	A	34Y	25.6 KC LO IMU
J02- 67	TB1-A30	A	35R	MG CDU 1/2X ERROR SIG
J02- 86	TB1-H11	A	36Y	COS AMG 16X TO CDU
J02- 87	TB1-K11	A	37Y	SIN AMG 16X TO CDU
J02- 90	TB1-H30	A	38Y	MG CDU ERROR SIG RET
J02- 92	TB1-D30	A	39Y	MG CDU MDA INPUT RET
J02- 94	TB1-D34	A	40Y	MG CDU ENCODER COMMON
J02-100	TB1-H10	A	36R	COS AMG 16X S3
J02-101	TB1-K10	A	37R	SIN AMG 16X S4
J02-104	TB1-H31	A	38R	MG CDU 16X ERROR SIG
J02-105	TB1-D31	A	39G	MG CDU MDA SLEW SIG
J02-106	TB1-D29	A	39R	MG CDU MDA TACH SIG
J02-107	TB1-D35	A	40G	MG CDU ENCODER PHASE 1
J02-108	TB1-D33	A	40R	MG CDU ENCODER PHASE 2
J03- 1	TB1-A 8	A	41R	800 CPS 28 V 1 PCT HI IMU
J03- 2	TB1-D 2	A	42Y	800 CPS 28 V 5 PCT L-90 DEG LO IMU
J03- 3	TB1-D 1	A	42R	800 CPS 28 V 5 PCT L-90 DEG HI IMU
J03- 6	TB1-C15	A	43Y	COS AOG 1X S1

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(CONT.)

FROM	TO	COND	NO	CIRCUIT FUNCTION
J03- 7	TB1-D15	A	44Y	SIN AOG 1X S4
J03- 11	TB1-A 7	A	45G	800 CPS 28 V 1 PCT HI IMU
J03- 12	TB1-B 6	A	45Y	ZEROING RSVR 800 CPS
J03- 14	TB1-B 8	A	41Y	800 CPS 28 V 1 PCT LO IMU
J03- 15	TB1-B53	A	46	+28 VDC CDU NOT LOCK
J03- 16	TB1-G 6	A	47	+28 VDC IMU
J03- 20	TB1-C16	A	43R	COS AOG 1X TO CDU
J03- 21	TB1-D16	A	44R	SIN AOG 1X TO CDU
J03- 25	TB1-A 6	A	45R	800 CPS 28 V 1 PCT HI IMU
J03- 28	TB1-A 1	A	48R	400 CPS VARIABLE ILLUMINATION POWER
J03- 29	TB1-B 1	A	48Y	400 CPS 6 V LO
J03- 30	TB1-C51	A	49	+28 VDC IMU FOR OG MDA
J03- 31	TB1-G19	A	50G	OG CDU MDA OUTPUT
J03- 32	TB1-G18	A	50Y	OG CDU MDA OUTPUT
J03- 34	TB1-G35	A	51	OG CDU 1X RSVR LOAD
J03- 35	TB1-G33	A	52R	OG CDU 1X ERROR SIG
J03- 41	TB1-G10	A	53	STRUCTURE GROUND
J03- 43	TB1-G20	A	50R	0 VDC IMU
J03- 45	TB1-G34	A	52Y	OG CDU ERROR SIG RET
J03- 50	TB1-H 1	A	54R	25.6 KC HI IMU
J03- 57	TB1-B29	A	55Y	OG CDU 1/2X ERROR SIG LO
J03- 60	TB1-H 2	A	54Y	25.6 KC LO IMU
J03- 67	TB1-A29	A	55R	OG CDU 1/2X ERROR SIG
J03- 86	TB1-F16	A	56Y	COS AOG 16X TO CDU
J03- 87	TB1-G16	A	57Y	SIN AOG 16X TO CDU
J03- 89	TB1-G29	A	58	OG CDU 16X RSVR LOAD
J03- 90	TB1-G30	A	59Y	OG CDU ERROR SIG RET
J03- 92	TB1-C30	A	60Y	OG CDU MDA INPUT RET
J03- 94	TB1-C34	A	61Y	OG CDU ENCODER COMMON
J03-100	TB1-F15	A	56R	COS AOG 16X S3
J03-101	TB1-G15	A	57R	SIN AOG 16X S4
J03-104	TB1-G31	A	59R	OG CDU 16X ERROR SIG

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(CONT.)

FROM	TO	COND	NO	CIRCUIT FUNCTION
J03-105	TB1-C31	A	60G	OG CDU MDA SLEW SIG
J03-106	TB1-C29	A	60R	OG CDU MDA TACH SIG
J03-107	TB1-C35	A	61G	OG CDU ENCODER PHASE 1
J03-108	TB1-C33	A	61R	OG CDU ENCODER PHASE 2
J04- 1	TB1-D 5	A	62R	800 CPS 28 V 1 PCT HI OPTICS
J04- 2	TB1-F 8	A	63Y	800 CPS 28 V 5 PCT L-90 DEG LO OPTICS
J04- 5	TB1-D 8	A	63R	800 CPS 28 V 5 PCT L-90 DEG HI OPTICS
J04- 6	TB1-H46	A	64Y	SHAFT CDU 1X RSVR P1
J04- 7	TB1-K46	A	65R	SHAFT CDU 1X RSVR P2
J04- 11	TB1-H40	A	66Y	SHAFT CDU 1/2X RSVR P1
J04- 14	TB1-F 5	A	62Y	800 CPS 28 V 1 PCT LO OPTICS
J04- 20	TB1-H45	A	64R	SHAFT CDU 1X RSVR P3
J04- 21	TB1-K45	A	65Y	SHAFT CDU 1X RSVR P4
J04- 25	TB1-H41	A	66R	SHAFT CDU 1/2X RSVR P3
J04- 28	TB1-A 2	A	67R	400 CPS VARIABLE ILLUMINATION POWER
J04- 29	TB1-B 2	A	67Y	400 CPS 6 V LO
J04- 31	TB1-H48	A	68Y	SHAFT CDU MOTOR PHASE 1
J04- 32	TB1-H49	A	68R	SHAFT CDU MOTOR PHASE 2
J04- 34	TB1-F50	A	69Y	SHAFT CDU 1X RSVR S1
J04- 35	TB1-F48	A	69G	SHAFT CDU 1X RSVR S2
J04- 41	TB1-G10	A	70	STRUCTURE GROUND
J04- 43	TB1-H50	A	68G	0 VDC OPTICS
J04- 44	TB1-D49	A	68N	CDU SHAFT MDA TUNING CAPACITOR
J04- 45	TB1-F49	A	69R	SHAFT CDU 1X RSVR S3
J04- 50	TB1-K 1	A	71R	25.6 KC HI OPTICS
J04- 56	TB1-C45	A	72R	SHAFT CDU 1/2X RSVR S2
J04- 57	TB1-D45	A	73R	SHAFT CDU 1/2X RSVR S1
J04- 60	TB1-K 2	A	71Y	25.6 KC LO OPTICS
J04- 66	TB1-C46	A	72Y	SHAFT CDU 1/2X RSVR S4
J04- 67	TB1-D46	A	73Y	SHAFT CDU 1/2X RSVR S3

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(CONT.)

FROM	TO	COND	NO	CIRCUIT FUNCTION
J04- 86	TB1-A45	A	74Y	SHAFT CDU 16X RSVR P1
J04- 87	TB1-B45	A	75R	SHAFT CDU 16X RSVR P2
J04- 90	TB1-G41	A	76R	SHAFT CDU 16X RSVR S3
J04- 92	TB1-G38	A	77Y	SHAFT CDU TACH LO
J04- 94	TB1-A34	A	78Y	SHAFT CDU ENCODER COMMON
J04-100	TB1-A46	A	74R	SHAFT CDU 16X RSVR P3
J04-101	TB1-B46	A	75Y	SHAFT CDU 16X RSVR P4
J04-104	TB1-G40	A	76Y	SHAFT CDU 16X RSVR S2
J04-106	TB1-G37	A	77R	SHAFT CDU TACH HI
J04-107	TB1-A35	A	78G	SHAFT CDU ENCODER PHASE 1
J04-108	TB1-A33	A	78R	SHAFT CDU ENCODER PHASE 2
J05- 1	TB1-D 5	A	79R	800 CPS 28 V 1 PCT HI OPTICS
J05- 2	TB1-F 8	A	80Y	800 CPS 28 V 5 PCT L-90 DEG LO OPTICS
J05- 4	TB1-D41	A	81Y	TRUNNION CDU 1/4X RSVR P3
J05- 5	TB1-D 8	A	80R	800 CPS 28 V 5 PCT L-90 DEG HI OPTICS
J05- 8	TB1-D44	A	82Y	TRUNNION CDU 1/4X RSVR S1
J05- 9	TB1-C44	A	83R	TRUNNION CDU 1/4X RSVR S2
J05- 10	TB1-C43	A	83Y	TRUNNION CDU 1/4X RSVR S4
J05- 11	TB1-B19	A	84G	TRUNNION CDU 1/2X RSVR P1 AND P3
J05- 12	TB1-B18	A	84Y	TRUNNION CDU 1/2X RSVR P2
J05- 14	TB1-F 5	A	79Y	800 CPS 28 V 1 PCT LO OPTICS
J05- 17	TB1-D40	A	81R	TRUNNION CDU 1/4X RSVR P2
J05- 22	TB1-D43	A	82R	TRUNNION CDU 1/4X RSVR S3
J05- 25	TB1-B19	A	84R	TRUNNION CDU 1/2X RSVR P3
J05- 28	TB1-A 2	A	85R	400 CPS VARIABLE ILLUMINATION POWER
J05- 29	TB1-B 2	A	85Y	400 CPS 6 V LO
J05- 31	TB1-K48	A	86Y	TRUNNION CDU MOTOR PHASE 1
J05- 32	TB1-K49	A	86R	TRUNNION CDU MOTOR PHASE 2
J05- 41	TB1-G11	A	87	STRUCTURE GROUND
J05- 43	TB1-K50	A	86G	0 VDC OPTICS

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FROM	TO	COND	NO	CIRCUIT FUNCTION
J05- 44	TB1-D50	A	86N	CDU TRUNNION MDA TUNING CAPACITOR
J05- 50	TB1-K 1	A	88R	25.6 KC HI OPTICS
J05- 56	TB1-H44	A	89R	TRUNNION CDU 1/2X RSVR S2
J05- 60	TB1-K 2	A	88Y	25.6 KC LO OPTICS
J05- 66	TB1-H43	A	89Y	TRUNNION CDU 1/2X RSVR S4
J05- 67	TB1-K43	A	90Y	TRUNNION CDU 1/2X RSVR S3
J05- 68	TB1-K44	A	90R	TRUNNION CDU 1/2X RSVR S1
J05- 86	TB1-A44	A	91Y	TRUNNION CDU 16X RSVR P1
J05- 87	TB1-B44	A	92Y	TRUNNION CDU 16X RSVR P2
J05- 90	TB1-C41	A	93R	TRUNNION CDU 16X RSVR S3
J05- 92	TB1-C38	A	94Y	TRUNNION CDU TACHOMETER LO
J05- 94	TB1-B34	A	95Y	TRUNNION CDU ENCODER COMMON
J05-100	TB1-A43	A	91R	TRUNNION CDU 16X RSVR P3
J05-101	TB1-B43	A	92R	TRUNNION CDU 16X RSVR P4
J05-104	TB1-C40	A	93Y	TRUNNION CDU 16X RSVR S2
J05-106	TB1-C37	A	94R	TRUNNION CDU TACHOMETER HI
J05-107	TB1-B35	A	95G	TRUNNION CDU ENCODER PHASE 1
J05-108	TB1-B33	A	95R	TRUNNION CDU ENCODER PHASE 2
J06- 1	P01- 1	A	96R	PITCH ATTITUDE ERROR METER +
J06- 2	P01- 2	A	96Y	PITCH ATTITUDE ERROR METER -
J06- 6	P01- 6	A	97	ENTRY RELAY CONTROL RESET
J06- 9	P01- 9	A	98	MODE SWITCH INTERLOCK
J06- 12	TB1-A48	A	99Y	MODE RELAY COMMON TO AGC
J06- 14	P01- 14	A	100R	YAW ATTITUDE ERROR METER +
J06- 15	P01- 15	A	100Y	YAW ATTITUDE ERROR METER -
J06- 18	P01- 18	A	101	MODE RELAY COMMON TO D AND C ELECT
J06- 22	P01- 22	A	102	ATTITUDE CONTROL MODE LIGHT
J06- 23	P01- 23	A	103	FINE ALIGN RELAY CONTROL
J06- 24	TB1-G 3	A	104Y	ATTITUDE CONTROL RELAY CONTROL
J06- 25	P01- 25	A	105	ENTRY RELAY CONTROL

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FROM	TO	COND	NO	CIRCUIT FUNCTION	
J06- 28	P01- 28	A	106Y	ROLL ATTITUDE ERROR METER -	
J06- 29	P01- 29	A	106R	ROLL ATTITUDE ERROR METER +	
J06- 34	P01- 34	A	107	ZERO ENCODER RELAY CONTROL	
J06- 35	P01- 35	A	108	COARSE ALIGN RELAY CONTROL	
J06- 36	P01- 36	A	109	CDU MANUAL RELAY CONTROL	
J06- 37	P01- 37	A	110	MANUAL ALIGN	
J06- 46	P01- 46	A	111	ATTITUDE CONTROL MODE INTERLOCK	
J06- 56	P01- 56	A	112	MANUAL ALIGN ENABLE	
J06- 68	TB1-C56	A	113Y	AGC COMMON (ISS)	
J06- 69	J24- 12	A	114Y	TRANSFER SWITCH INDICATION TO AGC	164
J06- 78	TB1-D 3	A	115	0 VDC IMU	
J06- 79	P01- 79	A	116	ENTRY MODE LIGHT	
J06- 81	TB1-B48	A	99R	ATTIT CONT MODE COMMAND FROM AGC	
J06- 91	TB1-G 8	A	117	STRUCTURE GROUND	
J06- 92	P01- 92	A	118	COARSE ALIGN MODE LIGHT	
J06- 93	P01- 93	A	119	MODE RELAY COMMON	
J06- 94	P01- 94	A	120	FINE ALIGN MODE LIGHT	
J06-104	P01-104	A	121	ZERO ENCODER MODE LIGHT	
J06-105	P01-105	A	122	CDU MANUAL MODE LIGHT	
J06-107	TB1-B 3	A	123Y	400 CPS 6 V LO	
J06-108	TB1-A 3	A	123R	400 CPS VARIABLE ILLUMINATION POWER	
J08- 17	TB1-B21	A	146	SPARE FAIL LIGHT 3 LO	
J08- 18	TB1-A23	A	147	GIMBAL LOCK LIGHT HI	
J08- 19	TB1-B21	A	148	GIMBAL LOCK LIGHT LO	
J08- 28	TB1-B21	A	149	SPARE FAIL LIGHT 2 LO	
J08- 29	TB1-G 8	A	150	STRUCTURE GROUND	
J08- 30	TB1-B22	A	151	ZERO ENCODER LIGHT LO	
J08- 31	TB1-A25	A	152	IMU DELAY LIGHT LO	
J08- 32	TB1-C 4	A	153	MASTER CAUTION LIGHT HI	
J08- 36	TB1-B75	A	154Y	400 CPS 6 V LO	

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FROM	TO	COND	NO	CIRCUIT FUNCTION
J08- 41	TB1-A21	A	155	ZERO ENCODER LIGHT HI
J08- 42	TB1-A26	A	156	IMU DELAY LIGHT HI
J08- 43	J22- 40	A	157	MASTER CAUTION LIGHT RET
J08- 46	TB1-B77	A	154G	PROJECTION LAMP LO INTENSITY
J08- 50	TB1-A20	A	158	SPARE FAIL LIGHT 1 HI
J08- 51	TB1-C26	A	159Y	G+N ERROR LIGHT HI
J08- 52	TB1-C25	A	159R	G+N ERROR LIGHT LO
J08- 53	J22- 65	A	160	MASTER WARNING LIGHT RET
J08- 54	TB1-C 4	A	161	MASTER WARNING LIGHT HI
J08- 55	TB1-B76	A	154R	PROJECTION LAMP HI INTENSITY
J08- 60	TB1-A22	A	162	IMU FAIL LIGHT HI
J08- 61	TB1-B22	A	163	IMU FAIL LIGHT LO
J08- 62	TB1-B26	A	164R	IMU TEMP CONT FAIL LIGHT HI
J08- 63	TB1-B25	A	164Y	IMU TEMP CONT FAIL LIGHT LO
J08- 66	TB1-A76	A	165G	MDV SLEW CONTROL 1.5 V 400 CPS
J08- 67	TB1-A53	A	166	+28 VDC MDV SWITCHED
J08- 68	TB1-A77	A	165R	400 CPS 26 V MDV RSVR EXC
J08- 70	TB1-B22	A	167	SPARE FAIL LIGHT 1 LO
J08- 71	TB1-D26	A	168R	AGC POWER SUPPLY FAIL SIG HI
J08- 72	TB1-A24	A	169	CDU FAIL LIGHT HI
J08- 73	TB1-B24	A	170	ACCEL FAIL LIGHT HI
J08- 78	TB1-B52	A	171	STEP-UP-C
J08- 79	TB1-A52	A	172	STEP-DOWN-C
J08- 81	TB1-A78	A	165Y	400 CPS 26 V SLEW
J08- 82	TB1-D25	A	168Y	AGC POWER SUPPLY FAIL LIGHT LO
J08- 83	TB1-B23	A	173	CDU FAIL LIGHT LO
J08- 84	TB1-B23	A	174	ACCEL FAIL LIGHT LO
J08- 92	TB1-D 4	A	175	0 VDC IMU
J08- 93	TB1-A51	A	176	STEP-DOWN-R
J08- 95	TB1-A75	A	165N	400 CPS 26 V LO
J08-106	TB1-B51	A	177	STEP-UP-R

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FROM	TO	COND	NO	CIRCUIT FUNCTION	
J09- 1	TB1-F77	A	285	0 VDC OPTICS	
J09- 2	TB1-A61	A	286R	TRACKER MODE RELAY COMMAND	
J09- 3	J22- 89	A	287Y	ROLL ATTIT IMPULSE CONTR OUTPUT RIGHT	
J09- 4	J22- 18	A	288Y	PITCH ATTIT IMPULSE CONTR OUTPUT UP	
J09- 5	J22- 35	A	288R	PITCH ATTIT IMPULSE CONTR OUTPUT DOWN	
J09- 6	J22- 87	A	289R	YAW ATTIT IMPULSE CONTR OUTPUT LEFT	
J09- 7	J22- 88	A	289G	YAW ATTIT IMPULSE CONTR INPUT	
J09- 8	TB1-K68	A	290R	TRUNNION HAND CONTROLLER OUTPUT HI	
J09- 10	TB1-H68	A	291R	SHAFT HAND CONTROLLER OUTPUT HI	
J09- 14	J22- 64	A	295	SPACECRAFT LAMP TEST	
J09- 15	TB1-D70	A	296	0 VDC SPACECRAFT	
J09- 16	J22- 90	A	287G	ROLL ATTIT IMPULSE CONTR INPUT	
J09- 17	J22- 60	A	287R	ROLL ATTIT IMPULSE CONTR OUTPUT LEFT	
J09- 18	J22- 36	A	288G	PITCH ATTIT IMPULSE CONTR INPUT	
J09- 20	J22- 58	A	289Y	YAW ATTIT IMPULSE CONTR OUTPUT RIGHT	
J09- 22	TB1-K69	A	290Y	TRUNNION HAND CONTROLLER OUTPUT LO	
J09- 24	TB1-H69	A	291Y	SHAFT HAND CONTROLLER OUTPUT LO	
J09- 26	TB1-C62	A	297	0 VDC IMU	
J09- 30	P10- 32	A	298Y	ACCEPT MARK	
J09- 31	P10- 16	A	299	MANUAL MARK COMMAND	
J09- 32	TB1-A54	A	300R	PANEL BRIGHTNESS CONTROL	
J09- 33	P10- 33	A	301Y	MARK REJECT	
J09- 34	TB1-F68	A	302R	SCT TRUNNION TRACKER MODE INPUT HI	
J09- 35	TB1-F69	A	302Y	SCT TRUNNION TRACKER MODE INPUT LO	
J09- 38	TB1-B25	A	591	IMU TEMP CONT FAIL LIGHT LO	
J09- 39	TB1-D25	A	592	AGC POWER SUPPLY FAIL LIGHT LO	
J09- 40	J22- 8	A	303Y	0 VDC FROM NAA	
J09- 41	J22- 7	A	303R	+28 VDC FROM NAA	
J09- 42	J24- 31	A	304Y	TRACKER ON INDICATION TO AGC	107
J09- 43	TB1-G68	A	305R	PHOTOMETER MARK REJECT HI	
J09- 44	TB1-A55	A	300Y	PANEL BRIGHTNESS CONTROL	
J09- 45	TB1-A71	A	306G	800 CPS 28 V 1 PCT HI OPTICS TRACKER PWR	

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FROM	TO	COND NO	CIRCUIT FUNCTION	
J09- 46	TB1-B77	A 307Y	PROJECTION LAMP LO INTENSITY	
J09- 47	TB1-A68	A 308Y	AGC COMMON (OSS)	
J09- 48	TB1-A69	A 308R	OPTICS ZERO ENCODER INDICATION	
J09- 49	J24- 54	A 309Y	OPTICS MODE SW COMPUTER INDICATION	106
J09- 50	J22- 2	A 303G	ATTITUDE DISABLE SIG TO NAA	
J09- 51	TB1-K72	A 310	+28 VDC MDV	
J09- 52	P10- 92	A 311Y	400 CPS 6 V LO	
J09- 53	P10-106	A 311R	400 CPS 6 V HI	
J09- 54	TB1-A 3	A 312R	400 CPS VARIABLE ILLUMINATION POWER	
J09- 55	TB1-B76	A 307R	PROJECTION LAMP HI INTENSITY	
J09- 58	TB1-B57	A 313Y	0 DEG OFFSET RELAY COMMAND	
J09- 59	TB1-B58	A 313R	25 DEG OFFSET RELAY COMMAND	
J09- 60	TB1-G69	A 305Y	PHOTOMETER MARK REJECT LO	
J09- 61	P10-105	A 311G	400 CPS 6 V HI	
J09- 62	TB1-C25	A 590	G+N ERROR LIGHT LO	
J09- 65	P10- 39	A 314R	400 CPS 1.5 V PI PHASE	
J09- 66	TB1-A76	A 315G	MDV SLEW CONTROL 1.5 V 400 CPS	
J09- 67	TB1-A53	A 316	+28 VDC MDV SWITCHED	
J09- 68	TB1-A77	A 315R	400 CPS 26 V MDV RSVR EXC	
J09- 69	TB1-B72	A 306Y	800 CPS 28 V 1 PCT LO OPTICS	
J09- 70	TB1-B59	A 286G	COMPUTER RELAY COMMAND	
J09- 71	TB1-H71	A 317	+28 VDC OPTICS	
J09- 72	TB1-B60	A 286Y	ZERO OPTICS MODE COMMAND	
J09- 73	TB1-D72	A 318	CONDITION LAMP TEST	
J09- 74	TB1-F60	A 319R	IMU TEMP ALARM AMP PIN 15	
J09- 75	TB1-F59	A 320	IMU TEMP ALARM AMP PIN 14	
J09- 76	TB1-D63	A 321Y	IMU TEMP CONT K2 PIN 6	
J09- 77	P10- 38	A 314Y	400 CPS 1.5 V ZERO PHASE	
J09- 78	TB1-B52	A 322	STEP-UP-C	
J09- 79	TB1-A52	A 323	STEP-DOWN-C	
J09- 80	TB1-A72	A 306R	800 CPS 28 V 1 PCT HI OPTICS	
J09- 81	TB1-A78	A 315Y	400 CPS 26 V SLEW	

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FROM	TO	COND NO	CIRCUIT FUNCTION	
J09- 82	TB1-A57	A 313G	RESOLVED MODE RELAY COMMAND	
J09- 83	TB1-F76	A 593	0 VDC OPTICS	
J09- 84	TB1-C 3	A 312Y	MODE LAMP TEST PWR	
J09- 85	TB1-K62	A 324G	IRIG TEMP BRIDGE AMP PIN 6	
J09- 86	TB1-K60	A 324R	IRIG TEMP GAIN SWITCH NC	
J09- 87	TB1-H60	A 325G	IMU TEMP CONT AMP PIN 5	
J09- 88	TB1-G60	A 325N	IMU TEMP CONT K2 PIN 5	
J09- 89	TB1-K61	A 324N	IRIG ZERO DEVIATION CHECK	
J09- 90	TB1-D62	A 321R	EMERG HTR CONT MODULE LO	
J09- 91	TB1-H70	A 326	STRUCTURE GROUND	
J09- 92	TB1-F62	A 319Y	IMU TEMP ALARM AMP PIN 5	
J09- 93	TB1-A51	A 327	STEP-DOWN-R	
J09- 94	TB1-F63	A 321G	TEMPERATURE CONTROLLER 0 VDC IMU	
J09- 95	P10- 48	A 314G	400 CPS 26 V HI	
J09- 96	TB1-B71	A 328	+28 VDC OPTICS TRACKER POWER	
J09- 97	TB1-H62	A 329Y	ACCEL INDICATING SENSOR HI	
J09- 98	TB1-G62	A 329N	ACCEL BRIDGE AMP PIN 6	
J09- 99	TB1-B23	A 292	CONDITION LAMPS COMMON	
J09-100	TB1-G59	A 325R	IMU HTR CURRENT AMP PIN 5	
J09-101	TB1-H59	A 325Y	IMU TEMP CONT K1 PIN 3	
J09-102	TB1-K59	A 324Y	IMU TEMP CONT -5 DEG GAIN CHECK	
J09-103	TB1-G64	A 329G	IMU IMU TEMP CONT +5 DEG GAIN CHECK	
J09-104	TB1-G63	A 329R	ACCEL ZERO DEVIATION CHECK	
J09-105	TB1-F61	A 319G	IMU TEMP ALARM BIAS RESISTOR	
J09-106	TB1-B51	A 330	STEP-UP-R	
J09-107	TB1-A25	A 589	IMU DELAY LIGHT LO	
J09-108	TB1-C71	A 331	+28 VDC OPTICS DAC POWER	
J10- 2	TB1-D72	A 477	CONDITION LAMP TEST	328
J10- 3	TB1-A21	A 473G	ZERO ENCODER LIGHT HI	301
J10- 4	TB1-A24	A 473R	CDU FAIL LIGHT HI	302

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FROM	TO	COND NO	CIRCUIT FUNCTION	
J10- 5	TB1-B24	A 473Y	ACCEL FAIL LIGHT HI	303
J10- 6	TB1-A22	A 478	IMU FAIL LIGHT HI	304
J10- 7	TB1-A20	A 479	SPARE FAIL LIGHT 1 HI	305
J10- 8	TB1-K71	A 483	+28 VDC MDV	306
J10- 9	TB1-B56	A 481	AGC FAIL SIG	326
J10- 10	TB1-K71	A 489	+28 VDC MDV	327
J10- 12	TB1-B48	A 474G	ATTIT CONT MODE COMMAND FROM AGC	314
J10- 13	TB1-A48	A 474Y	MODE RELAY COMMON TO AGC	315
J10- 14	J21- 8	A 444R	OUT 0 11	224S
J10- 15	J21- 23	A 447R	OUT 0 12	225S
J10- 16	J21- 87	A 445R	OUT 0 13	226S
J10- 17	J21- 35	A 424R	OUT 0 14	227S
J10- 18	J21- 7	A 425R	OUT 0 15	228S
J10- 19	J21- 86	A 428R	TELEMETRY FAIL ALARM	231S
J10- 21	TB1-C50	A 475Y	ZERO ENCODER MODE COMMAND FROM AGC	307
J10- 22	TB1-A50	A 475G	COARSE ALIGN MODE COMMAND FROM AGC	308
J10- 23	TB1-C48	A 476Y	CDU MANUAL MODE COMMAND FROM AGC	309
J10- 24	TB1-B50	A 475R	FINE ALIGN MODE COMMAND FROM AGC	310
J10- 25	TB1-C49	A 476R	ENTRY MODE COMMAND FROM AGC	311
J10- 26	TB1-A48	A 474R	MODE RELAY COMMON TO AGC	312
J10- 28	J21- 67	A 438R	OUT 0 4	217S
J10- 29	J21- 89	A 439R	OUT 0 5	218S
J10- 30	J21- 37	A 440R	OUT 0 6	219S
J10- 31	J21- 21	A 446R	OUT 0 7	220S
J10- 32	J21- 34	A 423R	PROGRAM CHECK FAIL ALARM	232S
J10- 33	J21- 6	A 429R	SCALER FAIL ALARM	233S
J10- 34	J21- 29	A 466R	KEY CODE 1	201S
J10- 35	J21- 48	A 464R	KEY CODE 2	202S
J10- 36	J21- 82	A 461R	KEY CODE 3	203S
J10- 37	J21- 52	A 463R	KEY CODE 4	204S
J10- 38	J21- 32	A 459R	KEY CODE 5	205S
J10- 39	J21- 31	A 462R	TEST ALARM	207S

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FROM	TO	COND NO	CIRCUIT FUNCTION	
J10- 40	J21- 10	A 426R	PROGRAM ALARM	229S
J10- 41	J21- 44	A 427R	COMPUTER ACTIVITY	230S
J10- 42	J21- 5	A 422R	TIMING (1.5 CPS)	244S
J10- 43	J21- 25	A 431R	COUNTER FAIL ALARM	235S
J10- 44	J21- 3	A 430R	PARITY FAIL ALARM	234S
J10- 45	J21- 84	A 468	SPARE	248
J10- 46	J21- 55	A 469	SPARE	249
J10- 47	J21- 27	A 465R	OR OF C1 THRU C33	210S
J10- 48	J21- 14	A 467R	ERROR RESET	208S
J10- 49	J21- 83	A 460R	KEY RESET NAV	209S
J10- 51	J21- 85	A 433R	RUPT LOCK ALARM	237S
J10- 53	J21- 71	A 432R	KEY RELEASE	236S
J10- 55	J21- 63	A 486	SPARE	240
J10- 56	J21- 91	A 485	DISKY GROUND	239
J10- 57	J21- 64	A 480	+13 V B	241
J10- 58	J21- 62	A 484	DISKY GROUND	251
J10- 59	J21- 65	A 482	+28 VDC AGC	243
J10- 60	J21- 40	A 437R	OUT 0 3	216S
J10- 61	J21- 42	A 441R	OUT 0 8	221S
J10- 62	J21- 88	A 442R	OUT 0 9	222S
J10- 63	J21- 36	A 443R	OUT 0 10	223S
J10- 64	J21- 33	A 434R	TC TRAP ALARM	238S
J10- 65	TB1-B60	A 472Y	ZERO OPTICS MODE COMMAND	316
J10- 66	TB1-A61	A 472R	TRACKER MODE RELAY COMMAND	317
J10- 67	TB1-B59	A 472G	COMPUTER RELAY COMMAND	331
J10- 69	E 26	A 470	COMMONED RETURNS GROUND	252
J10- 70	J21- 12	A 450	SPARE	211
J10- 71	J21- 26	A 449	POWER SUPPLY SYNC	212
J10- 72	J21- 46	A 448	SPARE	213
J10- 73	J21- 90	A 435R	OUT 0 1	214S
J10- 74	J21- 38	A 436R	OUT 0 2	215S
J10- 75	J21- 72	A 451	SPARE	247
J10- 82	E 34	A 452	COMMONED RETURNS GROUND	330

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FROM	TO	COND NO	CIRCUIT FUNCTION
J11-A1	TB1-K33	CC 60W	IG CDU 1X ERROR SIG
J11-A2	TB1-H33	CC 62W	MG CDU 1X ERROR SIG
J11-A3	TB1-G33	CC 64W	OG CDU 1X ERROR SIG
J11-A5	J12-A2	BB 9R	IMU MG ERROR SIG
J11-A5	TB1-B28	CC 68R	IMU MG ERROR SIG
J11-A6	J12-B1	BB 9L	IMU OG ERROR SIG
J11-A6	TB1-A28	CC 68L	IMU OG ERROR SIG
J11-B1	TB1-K34	CC 60R	IG CDU ERROR SIG RET
J11-B1	TB1-K28	CC 61W	IG CDU ERROR SIG RET
J11-B2	TB1-H34	CC 62R	MG CDU ERROR SIG RET
J11-B2	TB1-H28	CC 63W	MG CDU ERROR SIG RET
J11-B3	J17-B1	BB 10R	OG CDU ERROR SIG RET
J11-B3	TB1-G34	CC 64R	OG CDU ERROR SIG RET
J11-B5	J12-B2	BB 9K	IMU GIMBAL AND GYRO ERROR SIG LO
J11-B5	J11-S6	BB 28	0 VDC IMU
J11-B5	TB1-D28	CC 68K	IMU GIMBAL AND GYRO ERROR SIG LO
J11-B6	J12-A1	BB 9W	IMU IG AND Y GYRO ERROR SIG
J11-B6	TB1-C28	CC 68W	IMU IG AND Y GYRO ERROR SIG
J11-C1	TB1-K29	CC 61R	IG CDU ATTITUDE STEERING ERROR
J11-C2	TB1-H29	CC 63R	MG CDU ATTITUDE STEERING ERROR
J11-C3	J17-A1	BB 10W	OG CDU ATTITUDE STEERING ERROR
J11-D5	TB1-F19	CC 69W	IG TORQUE MOTOR RET
J11-D6	TB1-F18	CC 69R	IG TORQUE MOTOR HI
J11-F1	TB1-B11	CC 65R	IG ADA
J11-F3	TB1-K 8	CC 73R	3200 CPS 2 V FEEDBACK HI
J11-F6	TB1-D18	CC 70R	MG TORQUE MOTOR HI
J11-G1	TB1-A10	CC 65K	OG ADA
J11-G2	J11-P6	BB 17	0 VDC IMU
J11-G2	TB1-B10	CC 65W	0 VDC IMU
J11-G3	TB1-H 8	CC 73W	3200 CPS 2 V FEEDBACK LO
J11-G6	TB1-D19	CC 70W	MG TORQUE MOTOR RET
J11-H1	TB1-A11	CC 65L	MG ADA

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FROM	TO	COND NO	CIRCUIT FUNCTION	
J11-H5	TB1-C19	CC 71W	OG TORQUE MOTOR RET	
J11-H6	TB1-C18	CC 71R	OG TORQUE MOTOR HI	
J11-L1	J12-H2	BB 8R	3200 CPS 2 V HI	
J11-L1	TB1-K 7	CC 67L	3200 CPS 2 V HI	
J11-L2	J12-K2	BB 8W	3200 CPS 2 V LO	
J11-L2	TB1-H 7	CC 67W	3200 CPS 2 V LO	
J11-L3	TB1-K 3	CC 72	COARSE ALIGN RELAY CONTROL	
J11-L4	J12-K3	BB 7	STRUCTURE GROUND	
J11-L4	TB1-H 4	CC 80	STRUCTURE GROUND	
J11-L6	J23- 31	CC 1R	COMPUTER 3200 PPS OUT OF PHASE SYNC	152S
J11-M1	TB1-K 7	CC 67K	3200 CPS 2 V HI	
J11-M2	TB1-H 7	CC 67R	3200 CPS 2 V LO	
J11-M5	J11-P3	BB 18	0 VDC IMU	
J11-M5	J23- 52	CC 1W	COMPUTER 3200 PPS SYNC RET	152R
J11-M5	J23- 55	CC 2W	COMPUTER 3200 PPS SYNC RET	151R
J11-M6	J23- 54	CC 2R	COMPUTER 3200 PPS IN PHASE SYNC	151S
J11-N1	J17-P2	BB 11R	3200 CPS 20 V CT	
J11-N2	J17-R2	BB 11W	3200 CPS 20 V LO	
J11-N3	J12-P4	BB 16	COMPUTER 12.8 KPPS SYNC	
J11-N4	J12-P3	BB 5W	800 CPS 28 V 1 PCT LO IMU	
J11-N5	J12-N3	BB 5R	800 CPS 28 V 1 PCT HI IMU	
J11-N6	J13-P6	BB 13	-28 VDC	
J11-N6	TB1-C54	CC 66	-28 VDC	
J11-P1	J17-N2	BB 11L	3200 CPS 20 V HI	
J11-P2	J11-P3	BB 19	0 VDC IMU	
J11-P2	E 4	CC 79	0 VDC IMU	
J11-P3	J11-R3	BB 20	0 VDC IMU	
J11-P3	J11-M5	BB 18	0 VDC IMU	
J11-P3	J11-P2	BB 19	0 VDC IMU	
J11-P4	J11-P5	BB 21	0 VDC IMU	
J11-P4	J11-R4	BB 27	0 VDC IMU	
J11-P5	J11-P4	BB 21	0 VDC IMU	

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(CONT.)

FROM	TO	COND NO	CIRCUIT FUNCTION
J11-P6	J11-R6	BB 22	0 VDC IMU
J11-P6	J11-G2	BB 17	0 VDC IMU
J11-R1	J11-R2	BB 23	0 VDC IMU
J11-R1	TB1-C69	CC 78	0 VDC IMU
J11-R2	TB1-C70	CC 74	0 VDC IMU
J11-R2	J11-R1	BB 23	0 VDC IMU
J11-R3	TB1-B68	CC 75	0 VDC IMU
J11-R3	J11-P3	BB 20	0 VDC IMU
J11-R4	J11-R5	BB 24	0 VDC IMU
J11-R4	J11-P4	BB 27	0 VDC IMU
J11-R5	J11-R6	BB 26	0 VDC IMU
J11-R5	TB1-H26	CC 76	0 VDC IMU
J11-R5	J11-R4	BB 24	0 VDC IMU
J11-R6	J11-S6	BB 25	0 VDC IMU
J11-R6	J11-P6	BB 22	0 VDC IMU
J11-R6	J11-R5	BB 26	0 VDC IMU
J11-S1	J20-N1	BB 2	+28 VDC IMU
J11-S1	J11-S2	BB 15	+28 VDC IMU
J11-S2	J20-N2	BB 3	+28 VDC IMU
J11-S2	J11-S1	BB 15	+28 VDC IMU
J11-S3	J17-R1	BB 12	+28 VDC STBY TO 3200 CPS POWER SUPPLY
J11-S4	J15-S6	BB 1	+28 VDC IMU
J1'-S4	J12-S5	BB 6	+28 VDC IMU
J11-S4	J11-S5	BB 14	+28 VDC IMU
J11-S5	J20-L2	BB 4	+28 VDC IMU
J11-S5	J11-S4	BB 14	+28 VDC IMU
J11-S6	TB1-K26	CC 77	0 VDC IMU
J11-S6	J11-R6	BB 25	0 VDC IMU
J11-S6	J11-B5	BB 28	0 VDC IMU
J12-A1	J11-B6	BB 9W	IMU IG AND Y GYRO ERROR SIG

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FROM	TO	COND NO	CIRCUIT FUNCTION	
J12-A2	J11-A5	BB 9R	IMU MG ERROR SIG	
J12-A5	J13-D2	BB 44	X PIP ERROR MONITOR	
J12-A6	J13-F2	BB 45	Y PIP ERROR MONITOR	
J12-B1	J11-A6	BB 9L	IMU OG ERROR SIG	
J12-B2	J11-B5	BB 9K	IMU GIMBAL AND GYRO ERROR SIG LO	
J12-B5	J13-R6	BB 59	0 VDC IMU	
J12-B5	TB1-B41	CC 89	0 VDC IMU	
J12-B6	J14-H6	BB 29	Z PIP ERROR MONITOR	
J12-C1	TB1-F51	CC 87	TRAY 2 THERMISTER HI	
J12-C2	J13-C2	BB 55	THERMISTER LO	
J12-D1	J16-L4	BB 94R	COMPUTER 800 PPS OUT OF PHASE SYNC	
J12-D2	J16-M4	BB 94L	COMPUTER 800 PPS IN PHASE SYNC	
J12-D4	J24- 45	CC 10R	ACCEL FAIL	138S
J12-D5	J24- 70	CC 9R	CDU FAIL	124S
J12-D6	J24- 25	CC 8R	IMU FAIL	141S
J12-F1	J12-F2	BB 41	COMPUTER 800 PPS SYNC RET	
J12-F1	J12-R4	BB 49	0 VDC IMU	
J12-F1	J16-L3	BB 94W	COMPUTER 800 PPS SYNC RET	
J12-F2	J23- 51	CC 6W	COMPUTER 25.6 KPPS SYNC RET	153R
J12-F2	J23- 50	CC 7W	COMPUTER 25.6 KPPS SYNC RET	154R
J12-F2	J12-F1	BB 41	COMPUTER 800 PPS SYNC RET	
J12-F3	J17-M3	BB 52	0 VDC SPACECRAFT	
J12-F4	J24- 72	CC 10W	ACCEL FAIL RET	138R
J12-F5	J24- 71	CC 9W	CDU FAIL RET	124R
J12-F6	J24- 46	CC 8W	IMU FAIL RET	141R
J12-G1	J23- 30	CC 6R	COMPUTER 25.6 KPPS IN PHASE SYNC	153S
J12-G2	J23- 29	CC 7R	COMPUTER 25.6 KPPS OUT OF PHASE SYNC	154S
J12-G3	J22- 63	CC 4	G+N ERROR LIGHT (MAIN PANEL)	
J12-G4	J20-M6	BB 34	+28 VDC IMU FOR 800 CPS 5 PCT MTR PWRAMP	
J12-G5	J16-R2	BB 56	0 VDC IMU	
J12-G6	J16-N3	BB 37W	OG CDU FAILURE INDICATION	
J12-H1	J23- 73	CC 3W	COMPUTER 102.4 KPPS SYNC RET	156R

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FROM	TO	COND NO	CIRCUIT FUNCTION	
J12-H2	J11-L1	BB 8R	3200 CPS 2 V HI	
J12-H4	J20-K6	BB 33R	800 CPS 28 V 5 PCT L-90 DEG HI IMU	
J12-H4	J12-N2	BB 39	800 CPS 28 V 5 PCT L-90 DEG HI IMU	
J12-H4	TB1-D 1	CC 88R	800 CPS 28 V 5 PCT L-90 DEG HI IMU	
J12-H5	J16-M2	BB 37L	IG CDU FAILURE INDICATION	
J12-H6	J16-M3	BB 37R	MG CDU FAILURE INDICATION	
J12-K1	J23- 46	CC 3R	COMPUTER 102.4 KPPS SYNC	156S
J12-K2	J11-L2	BB 8W	3200 CPS 2 V LO	
J12-K3	J13-C6	BB 42	STRUCTURE GROUND	
J12-K3	J11-L4	BB 7	STRUCTURE GROUND	
J12-K3	SHLD CC 3	CC 3A	STRUCTURE GROUND	
J12-K4	J20-K5	BB 33W	800 CPS 28 V 5 PCT L-90 DEG LO IMU	
J12-K4	TB1-D 2	CC 88W	800 CPS 28 V 5 PCT L-90 DEG LO IMU	
J12-K6	J14-R2	BB 43W	+12, +32, +120 VDC RET GYRO	
J12-L1	J20-N5	BB 46	+28 VDC MDV	
J12-L2	TB1-C26	CC 86	G+N ERROR LIGHT HI	
J12-L6	J14-S2	BB 43R	+120 VDC GYRO	
J12-M1	J23- 26	CC 5	AGC POWER SUPPLY FAIL SIG HI	157S
J12-M1	TB1-D26	CC 85	AGC POWER SUPPLY FAIL SIG HI	
J12-M3	TB1-B56	CC 84	AGC FAIL SIG	
J12-M5	J14-S5	BB 43K	+32 VDC GYRO	
J12-M6	J14-S3	BB 43L	+12 VDC GYRO	
J12-N1	J12-P1	BB 38	800 CPS 28 V 5 PCT IMU WHEELS PHASE A	
J12-N2	J12-H4	BB 39	800 CPS 28 V 5 PCT L-90 DEG HI IMU	
J12-N3	J15-P6	BB 30R	800 CPS 28 V 1 PCT HI IMU	
J12-N3	J11-N5	BB 5R	800 CPS 28 V 1 PCT HI IMU	
J12-N4	J12-N5	BB 40	25.6 KC HI IMU	
J12-N4	TB1-G 1	CC 83R	25.6 KC HI IMU	
J12-N5	J15-N6	BB 31R	25.6 KC HI IMU	
J12-N5	J12-N4	BB 40	25.6 KC HI IMU	
J12-N6	J17-N3	BB 51W	25.6 KC LO OPTICS	
J12-N6	J12-R6	BB 53	0 VDC OPTICS	

(CONT.)

FROM	TO	COND NO	CIRCUIT FUNCTION
J12-N6	TB1-K 2	CC 82W	25.6 KC LO OPTICS
J12-P1	TB1-C74	CC 81L	800 CPS 28 V 5 PCT IMU WHEELS PHASE A
J12-P1	J12-N1	BB 38	800 CPS 28 V 5 PCT IMU WHEELS PHASE A
J12-P2	TB1-C72	CC 81R	800 CPS 28 V 5 PCT IMU WHEELS PHASE B
J12-P3	J15-P5	BB 30W	800 CPS 28 V 1 PCT LO IMU
J12-P3	J11-N4	BB 5W	800 CPS 28 V 1 PCT LO IMU
J12-P4	J17-R3	BB 50W	COMPUTER 12.8 KPPS SYNC
J12-P4	J11-N3	BB 16	COMPUTER 12.8 KPPS SYNC
J12-P5	J15-N5	BB 31W	25.6 KC LO IMU
J12-P5	J12-R2	BB 54	0 VDC IMU
J12-P5	TB1-G 2	CC 83W	25.6 KC LO IMU
J12-P6	J17-P3	BB 51R	25.6 KC HI OPTICS
J12-P6	TB1-K 1	CC 82R	25.6 KC HI OPTICS
J12-R1	TB1-C73	CC 81W	800 CPS 28 V 5 PCT IMU WHEELS LO
J12-R2	J12-R3	BB 57	0 VDC IMU
J12-R2	TB1-C70	CC 90	0 VDC IMU
J12-R2	J12-P5	BB 54	0 VDC IMU
J12-R3	J12-R4	BB 58	0 VDC IMU
J12-R3	TB1-C69	CC 91	0 VDC IMU
J12-R3	J12-R2	BB 57	0 VDC IMU
J12-R4	J12-F1	BB 49	0 VDC IMU
J12-R4	TB1-C68	CC 92	0 VDC IMU
J12-R4	J12-R3	BB 58	0 VDC IMU
J12-R5	TB1-K25	CC 93	0 VDC IMU
J12-R6	TB1-H53	CC 94	0 VDC OPTICS
J12-R6	J12-N6	BB 53	0 VDC OPTICS
J12-S1	J20-M1	BB 35	+28 VDC IMU
J12-S1	J12-S3	BB 47	+28 VDC IMU
J12-S2	J20-M2	BB 36	+28 VDC IMU
J12-S2	J12-S4	BB 48	+28 VDC IMU
J12-S3	J12-S1	BB 47	+28 VDC IMU
J12-S4	J12-S2	BB 48	+28 VDC IMU

(CONT.)

FROM	TO	COND NO	CIRCUIT FUNCTION
J12-S5	J11-S4	BB 6	+28 VDC IMU
J12-S6	J20-P5	BB 32	+28 VDC OPTICS
J13-A1	TB1-F11	CC 95R	X PIP ERROR HI
J13-A3	TB1-D11	CC 98R	Y PIP ERROR HI
J13-A6	J14-A6	BB 62	X GYRO DC DIFF AMP OUTPUT
J13-B1	TB1-F10	CC 95W	X PIP ERROR LO
J13-B3	TB1-D10	CC 98W	Y PIP ERROR LO
J13-C1	TB1-D51	CC104	TRAY 3 THERMISTER HI
J13-C2	J14-B2	BB 73	THERMISTER LO
J13-C2	J12-C2	BB 55	THERMISTER LO
J13-C6	J14-H5	BB 64	STRUCTURE GROUND
J13-C6	E 1	CC342	STRUCTURE GROUND
J13-C6	J12-K3	BB 42	STRUCTURE GROUND
J13-D1	J15-L4	BB 69	P X
J13-D2	TB1-B40	CC 97	X PIP ERROR MONITOR
J13-D2	J12-A5	BB 44	X PIP ERROR MONITOR
J13-D3	J15-L3	BB 71	P Y
J13-D6	TB1-F23	CC101L	X GYRO TORQUE +
J13-F1	J15-M4	BB 70	N X
J13-F2	TB1-A40	CC100	Y PIP ERROR MONITOR
J13-F2	J12-A6	BB 45	Y PIP ERROR MONITOR
J13-F3	J15-M3	BB 72	N Y
J13-F6	TB1-F22	CC101W	X GYRO TORQUE RET
J13-G6	TB1-F21	CC101R	X GYRO TORQUE -
J13-H1	TB1-K23	CC 96L	X PIP TORQUE +
J13-H6	J14-G1	BB 63L	X GYRO CAL DUMMY
J13-K1	TB1-K22	CC 96W	X PIP TORQUE RET
J13-K6	J14-H1	BB 63R	X GYRO TERNARY CUR SW TORQUE +
J13-L1	TB1-K21	CC 96R	X PIP TORQUE -
J13-L3	TB1-H23	CC 99L	Y PIP TORQUE +

(CONT.)

FROM	TO	COND NO	CIRCUIT FUNCTION	
J13-L6	J14-K1	BB 63W	X GYRO TERNARY CUR SW TORQUE -	
J13-M3	TB1-H22	CC 99W	Y PIP TORQUE RET	
J13-N3	TB1-H21	CC 99R	Y PIP TORQUE -	
J13-N5	J14-H3	BB 60	PIPA INTERROGATE PULSE	
J13-N5	J23- 7	CC 11R	PIPA INTERROGATE PULSE	139S
J13-N6	J14-K3	BB 61	PIPA SWITCHING PULSE	
J13-N6	J23- 2	CC 12R	PIPA SWITCHING PULSE	140S
J13-P6	J14-P6	BB 68	-28 VDC	
J13-P6	J11-N6	BB 13	-28 VDC	
J13-R1	J14-R2	BB 67W	+12, +32, +120 VDC RET GYRO	
J13-R2	J14-R1	BB 66W	+32, +120 VDC RET PIP	
J13-R6	J14-R6	BB 74	0 VDC IMU	
J13-R6	E 5	CC102	0 VDC IMU	
J13-R6	J12-B5	BB 59	0 VDC IMU	
J13-S1	J14-S2	BB 67R	+120 VDC GYRO	
J13-S2	J14-S1	BB 66R	+120 VDC PIP	
J13-S3	J14-S5	BB 67L	+32 VDC GYRO	
J13-S4	J14-S4	BB 66L	+32 VDC PIP	
J13-S6	J14-S6	BB 65	+28 VDC IMU	
J13-S6	TB1-G 6	CC103	+28 VDC IMU	
J14-A1	TB1-C11	CC105R	Z PIP ERROR HI	
J14-A2	TB1-C10	CC105W	Z PIP ERROR LO	
J14-A6	J13-A6	BB 62	X GYRO DC DIFF AMP OUTPUT	
J14-B1	TB1-D52	CC111	TRAY 4 THERMISTER HI	
J14-B2	TB1-F52	CC112	THERMISTER LO	
J14-B2	J13-C2	BB 73	THERMISTER LO	
J14-D1	J23- 3	CC 13R	+ DX GYRO RATE	142R
J14-D2	J23- 11	CC 14R	- DX GYRO RATE	143R
J14-D3	J23- 55	CC 15R	+ DY GYRO RATE	144R
J14-D4	J23- 32	CC 16R	- DY GYRO RATE	145R

(CONT.)

FROM	TO	COND NO	CIRCUIT FUNCTION	
J14-D5	J23- 15	CC 17R	+ DZ GYRO RATE	146R
J14-D6	J23- 14	CC 18R	- DZ GYRO RATE	147R
J14-F6	J15-L2	BB 75	P Z	
J14-G1	J13-H6	BB 63L	X GYRO CAL DUMMY	
J14-G6	J15-M2	BB 76	N Z	
J14-H1	J13-K6	BB 63R	X GYRO TERNARY CUR SW TORQUE +	
J14-H3	J13-N5	BB 60	PIPA INTERROGATE PULSE	
J14-H5	J15-K3	BB 77	STRUCTURE GROUND	
J14-H5	J13-C6	BB 64	STRUCTURE GROUND	
J14-H6	TB1-A41	CC107	Z PIP ERROR MONITOR	
J14-H6	J12-B6	BB 29	Z PIP ERROR MONITOR	
J14-K1	J13-L6	BB 63W	X GYRO TERNARY CUR SW TORQUE -	
J14-K3	J13-N6	BB 61	PIPA SWITCHING PULSE	
J14-K4	J23- 25	CC 19R	GYRO RESET PULSE	148R
J14-L6	TB1-C23	CC109L	Z GYRO TORQUE +	
J14-M1	TB1-D23	CC108L	Y GYRO TORQUE +	
J14-M2	TB1-D21	CC108R	Y GYRO TORQUE -	
J14-M3	TB1-D22	CC108W	Y GYRO TORQUE RET	
J14-M6	TB1-C21	CC109R	Z GYRO TORQUE -	
J14-N6	TB1-C22	CC109W	Z GYRO TORQUE RET	
J14-P1	TB1-G23	CC106L	Z PIP TORQUE +	
J14-P2	TB1-G21	CC106R	Z PIP TORQUE -	
J14-P3	TB1-G22	CC106W	Z PIP TORQUE RET	
J14-P6	J13-P6	BB 68	-28 VDC	
J14-R1	J17-L4	BB 79W	+32, +120 VDC RET PIP	
J14-R1	J13-R2	BB 66W	+32, +120 VDC RET PIP	
J14-R2	J12-K6	BB 43W	+12, +32, +120 VDC RET GYRO	
J14-R2	J13-R1	BB 67W	+12, +32, +120 VDC RET GYRO	
J14-R6	E 6	CC110	0 VDC IMU	
J14-R6	TB1-H25	CC113	0 VDC IMU	
J14-R6	J13-R6	BB 74	0 VDC IMU	
J14-S1	J17-L5	BB 79R	+120 VDC PIP	

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FROM	TO	COND NO	CIRCUIT FUNCTION	
J14-S1	J13-S2	BB 66R	+120 VDC PIP	
J14-S2	J12-L6	BB 43	+120 VDC GYRO	
J14-S2	J13-S1	BB 67R	+120 VDC GYRO	
J14-S3	J12-M6	BB 43L	+12 VDC GYRO	
J14-S4	J17-T5	BB 79L	+32 VDC PIP	
J14-S4	J13-S4	BB 66L	+32 VDC PIP	
J14-S5	J12-M5	BB 43K	+32 VDC GYRO	
J14-S5	J13-S3	BB 67L	+32 VDC GYRO	
J14-S6	J15-S2	BB 78	+28 VDC IMU	
J14-S6	J13-S6	BB 65	+28 VDC IMU	
J15-A1	TB1-F28	CC130W	Z GYRO ERROR SIG	
J15-A3	J24- 30	CC 38W	MANUAL CDU MODE INDICATION TO AGC	160
J15-A4	J16-B2	BB 82R	IG DAC MDA SIG HI	
J15-A5	J16-B1	BB 82W	IG DAC MDA SIG LO	
J15-A5	E 8	CC120	IG DAC MDA SIG LO	
J15-A5	E 9	CC123	IG DAC MDA SIG LO	
J15-A6	J16-B4	BB 83R	MG DAC MDA SIG HI	
J15-A7	J16-B3	BB 83W	MG DAC MDA SIG LO	
J15-A7	E 10	CC121	MG DAC MDA SIG LO	
J15-A7	E 11	CC124	MG DAC MDA SIG LO	
J15-A8	J16-B6	BB 84R	OG DAC MDA SIG HI	
J15-A9	J16-B5	BB 84W	OG DAC MDA SIG LO	
J15-A9	E 12	CC122	OG DAC MDA SIG LO	
J15-A9	E 13	CC125	OG DAC MDA SIG LO	
J15-B1	TB1-G28	CC130L	X GYRO ERROR SIG	
J15-B2	TB1-D28	CC130R	IMU GIMBAL AND GYRO ERROR SIG LO	
J15-B3	J16-B7	BB 80	AGC COMMON (ISS)	
J15-B4	J24- 41	CC 26W	IG ENCODER + DELTA THETA	120S
J15-B5	J23- 42	CC 32W	IG CDU + DELTA THETA COMMAND	128S
J15-B6	J24- 19	CC 28W	MG ENCODER + DELTA THETA	122S

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FROM	TO	COND NO	CIRCUIT FUNCTION	
J15-B7	J23- 35	CC 34W	MG CDU + DELTA THETA COMMAND	130S
J15-B8	J24- 39	CC 30W	OG ENCODER + DELTA THETA	118S
J15-B9	J23- 21	CC 36W	OG CDU + DELTA THETA COMMAND	126S
J15-C1	TB1-F34	CC117W	IG CDU ENCODER COMMON	
J15-C2	TB1-F35	CC117L	IG CDU ENCODER PHASE 1	
J15-C3	TB1-C33	CC119R	OG CDU ENCODER PHASE 2	
J15-C4	J24- 67	CC 27R	IG ENCODER - DELTA THETA	121S
J15-C5	J23- 43	CC 33R	IG CDU - DELTA THETA COMMAND	129S
J15-C6	J24- 8	CC 29R	MG ENCODER - DELTA THETA	123S
J15-C7	J23- 18	CC 35R	MG CDU - DELTA THETA COMMAND	131S
J15-C8	J24- 40	CC 31R	OG ENCODER - DELTA THETA	119S
J15-C9	J23- 22	CC 37R	OG CDU - DELTA THETA COMMAND	127S
J15-D1	TB1-F33	CC117R	IG CDU ENCODER PHASE 2	
J15-D2	TB1-D33	CC118R	MG CDU ENCODER PHASE 2	
J15-D3	TB1-C34	CC119W	OG CDU ENCODER COMMON	
J15-D4	TB1-C35	CC119L	OG CDU ENCODER PHASE 1	
J15-D7	TB1-K15	CC126R	SIN AIG 16X S4	
J15-D8	TB1-K14	CC126W	SIN AIG 16X S2	
J15-D9	TB1-K11	CC127L	SIN AMG 16X TO CDU	
J15-F1	TB1-D35	CC118L	MG CDU ENCODER PHASE 1	
J15-F2	TB1-D34	CC118W	MG CDU ENCODER COMMON	
J15-F7	TB1-K16	CC126L	SIN AIG 16X TO CDU	
J15-F8	TB1-K 9	CC127W	SIN AMG 16X S2	
J15-F9	TB1-K10	CC127R	SIN AMG 16X S4	
J15-H4	J16-L1	BB 85W	FINE ALIGN RELAY CONTROL	
J15-H4	TB1-H 5	CC128R	FINE ALIGN RELAY CONTROL	
J15-K3	J16-N4	BB 88	STRUCTURE GROUND	
J15-K3	TB1-B49	CC132	STRUCTURE GROUND	
J15-K3	J14-H5	BB 77	STRUCTURE GROUND	
J15-K4	J24- 33	CC 24R	- DELTA V Z	137R
J15-K5	J24- 56	CC 25R	+ DELTA V Z	136R
J15-K6	J24- 44	CC 23R	- DELTA V Y	135R

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FROM	TO	COND NO	CIRCUIT FUNCTION	
J15-L2	J14-F6	BB 75	P Z	
J15-L3	J13-D3	BB 71	P Y	
J15-L4	J13-D1	BB 69	P X	
J15-L5	E 14	CC114	COMPUTER RET	
J15-L5	E 15	CC115	COMPUTER RET	
J15-L5	E 16	CC116	COMPUTER RET	
J15-L6	J24- 24	CC 22R	+ DELTA V Y	134R
J15-M2	J14-G6	BB 76	N Z	
J15-M3	J13-F3	BB 72	N Y	
J15-M4	J13-F1	BB 70	N X	
J15-M5	J24- 2	CC 20R	+ DELTA V X	132R
J15-M6	J24- 10	CC 21R	- DELTA V X	133R
J15-N5	J12-P5	BB 31W	25.6 KC LO IMU	
J15-N6	J12-N5	BB 31R	25.6 KC HI IMU	
J15-P5	J16-S3	BB 86W	800 CPS 28 V 1 PCT LO IMU	
J15-P5	J12-P3	BB 30W	800 CPS 28 V 1 PCT LO IMU	
J15-P6	J16-S4	BB 86R	800 CPS 28 V 1 PCT HI IMU	
J15-P6	J12-N3	BB 30R	800 CPS 28 V 1 PCT HI IMU	
J15-R2	TB1-K26	CC131	0 VDC IMU	
J15-R6	TB1-B53	CC129	+28 VDC CDU NOT LOCK	
J15-S1	J16-L2	BB 85R	ZERO ENCODER RELAY CONTROL	
J15-S1	TB1-K 5	CC128L	ZERO ENCODER RELAY CONTROL	
J15-S2	J20-L1	BB 81	+28 VDC IMU	
J15-S2	J14-S6	BB 78	+28 VDC IMU	
J15-S3	TB1-G 5	CC128W	LOCK CDU RELAY CONTROL	
J15-S6	J16-S2	BB 87	+28 VDC IMU	
J15-S6	J11-S4	BB 1	+28 VDC IMU	
J16-A1	TB1-F29	CC136R	IG CDU MDA TACH SIG	
J16-A2	TB1-F31	CC136W	IG CDU MDA SLEW SIG	
J16-A3	TB1-D29	CC141R	MG CDU MDA TACH SIG	

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FROM	TO	COND NO	CIRCUIT FUNCTION
J16-A4	TB1-D31	CC141W	MG CDU MDA SLEW SIG
J16-A5	TB1-C29	CC153R	OG CDU MDA TACH SIG
J16-A6	TB1-C31	CC153W	OG CDU MDA SLEW SIG
J16-A7	J24- 5	CC 41W	ZERO ENCODER MODE INDICATION TO AGC 158
J16-A8	TB1-D14	CC144W	SIN AOG 1X S2
J16-A8	J22- 12	CC348R	SIN AOG 1X S2
J16-A9	TB1-D15	CC144R	SIN AOG 1X S4
J16-A9	J22- 26	CC348W	SIN AOG 1X S4
J16-B1	TB1-F30	CC136L	IG CDU MDA INPUT RET
J16-B1	J15-A5	BB 82W	IG DAC MDA SIG LO
J16-B1	SHLD CC136	CC136A	IG CDU MDA INPUT RET
J16-B2	J15-A4	BB 82R	IG DAC HDA SIG HI
J16-B3	TB1-D30	CC141L	MG CDU MDA INPUT RET
J16-B3	J15-A7	BB 83W	MG DAC MDA SIG LO
J16-B3	SHLD CC141	CC141A	MG CDU MDA INPUT RET
J16-B4	J15-A6	BB 83R	MG DAC MDA SIG HI
J16-B5	TB1-C30	CC153L	OG CDU MDA INPUT RET
J16-B5	J15-A9	BB 84W	OG DAC MDA SIG LO
J16-B5	SHLD CC153	CC153A	OG CDU MDA INPUT RET
J16-B6	J15-A8	BB 84R	OG DAC MDA SIG HI
J16-B7	TB1-C56	CC173W	AGC COMMON (ISS)
J16-B7	J15-B3	BB 80	AGC COMMON (ISS)
J16-B8	TB1-C14	CC143W	COS AOG 1X S3
J16-B8	J22- 4	CC349W	COS AOG 1X S3
J16-B9	TB1-D16	CC144L	SIN AOG 1X TO CDU
J16-C1	TB1-K31	CC135W	IG CDU 16X ERROR SIG
J16-C2	TB1-K33	CC134W	IG CDU 1X ERROR SIG
J16-C3	TB1-H31	CC140W	MG CDU 16X ERROR SIG
J16-C4	TB1-H33	CC139W	MG CDU 1X ERROR SIG
J16-C5	TB1-G31	CC147R	OG CDU 16X ERROR SIG
J16-C6	TB1-G33	CC146W	OG CDU 1X ERROR SIG
J16-C7	TB1-G29	CC158	OG CDU 16X RSVR LOAD

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FROM	TO	COND NO	CIRCUIT FUNCTION
J16-C8	TB1-C15	CC143R	COS AOG 1X S1
J16-C8	J22- 13	CC349R	COS AOG 1X S1
J16-C9	TB1-C16	CC143L	COS AOG 1X TO CDU
J16-D1	TB1-A31	CC133W	IG CDU 1/2X ERROR SIG
J16-D2	TB1-K34	CC134R	IG CDU ERROR SIG RET
J16-D2	TB1-K30	CC135R	IG CDU ERROR SIG RET
J16-D3	TB1-A30	CC138W	MG CDU 1/2X ERROR SIG
J16-D4	TB1-H34	CC139R	MG CDU ERROR SIG RET
J16-D4	TB1-H30	CC140R	MG CDU ERROR SIG RET
J16-D5	TB1-A29	CC145W	OG CDU 1/2X ERROR SIG
J16-D6	TB1-G34	CC146R	OG CDU ERROR SIG RET
J16-D6	TB1-G30	CC147W	OG CDU ERROR SIG RET
J16-D7	TB1-F14	CC148R	COS AOG 16X S1
J16-D8	TB1-G14	CC152W	SIN AOG 16X S2
J16-D9	TB1-G15	CC152R	SIN AOG 16X S4
J16-F1	TB1-B31	CC133R	IG CDU 1/2X ERROR SIG LO
J16-F2	TB1-K35	CC155	IG CDU 1X RSVR LOAD
J16-F3	TB1-B30	CC138R	MG CDU 1/2X ERROR SIG LO
J16-F4	TB1-H35	CC156	MG CDU 1X RSVR LOAD
J16-F5	TB1-B29	CC145R	OG CDU 1/2X ERROR SIG LO
J16-F6	TB1-G35	CC157	OG CDU 1X RSVR LOAD
J16-F7	TB1-F15	CC148W	COS AOG 16X S3
J16-F8	TB1-F16	CC148L	COS AOG 16X TO CDU
J16-F9	TB1-G16	CC152L	SIN AOG 16X TO CDU
J16-G1	TB1-H15	CC163W	COS AIG 16X S3
J16-G2	TB1-H16	CC163L	COS AIG 16X TO CDU
J16-G3	TB1-H10	CC164W	COS AMG 16X S3
J16-G4	TB1-H11	CC164L	COS AMG 16X TO CDU
J16-H1	TB1-H14	CC163R	COS AIG 16X S1
J16-H3	TB1-H 9	CC164R	COS AMG 16X S1
J16-L1	J15-H4	BB 85W	FINE ALIGN RELAY CONTROL
J16-L2	J15-S1	BB 85R	ZERO ENCODER RELAY CONTROL

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FROM	TO	COND NO	CIRCUIT FUNCTION	
J16-L3	J12-F1	BB 94W	COMPUTER 800 PPS SYNC RET	
J16-L3	J23- 27	CC 39W	COMPUTER 800 PPS SYNC RET	150R
J16-L3	J23- 13	CC 40W	COMPUTER 800 PPS SYNC RET	149R
J16-L4	J12-D1	BB 94R	COMPUTER 800 PPS OUT OF PHASE SYNC	
J16-L4	J23- 12	CC 39R	COMPUTER 800 PPS OUT OF PHASE SYNC	150S
J16-M1	TB1-H 3	CC159W	ENTRY RELAY CONTROL	
J16-M2	TB1-C58	CC175K	IG CDU FAILURE INDICATION	
J16-M2	J12-H5	BB 37L	IG CDU FAILURE INDICATION	
J16-M3	TB1-C57	CC175L	MG CDU FAILURE INDICATION	
J16-M3	J12-H6	BB 37R	MG CDU FAILURE INDICATION	
J16-M4	J12-D2	BB 94L	COMPUTER 800 PPS IN PHASE SYNC	
J16-M4	J23- 4	CC 40R	COMPUTER 800 PPS IN PHASE SYNC	149S
J16-N1	TB1-G19	CC154W	OG CDU MDA OUTPUT	
J16-N2	TB1-G18	CC154R	OG CDU MDA OUTPUT	
J16-N3	TB1-D57	CC175R	OG CDU FAILURE INDICATION	
J16-N3	J12-G6	BB 37W	OG CDU FAILURE INDICATION	
J16-N4	J17-L6	BB 95	STRUCTURE GROUND	
J16-N4	TB1-A60	CC180	STRUCTURE GROUND	
J16-N4	J15-K3	BB 88	STRUCTURE GROUND	
J16-N5	J18-S1	BB 89W	800 CPS 28 V 1 PCT LO OPTICS	
J16-N5	TB1-F 5	CC161R	800 CPS 28 V 1 PCT LO OPTICS	
J16-N5	TB1-B72	CC172R	800 CPS 28 V 1 PCT LO OPTICS	
J16-N6	J20-H5	BB 92W	800 CPS 28 V 5 PCT L-90 DEG LO OPTICS	
J16-N6	TB1-F 8	CC162W	800 CPS 28 V 5 PCT L-90 DEG LO OPTICS	
J16-N6	TB1-B74	CC174W	800 CPS 28 V 5 PCT L-90 DEG LO OPTICS	
J16-P1	TB1-K19	CC137R	IG CDU MDA OUTPUT	
J16-P2	TB1-D59	CC176	0 VDC IMU	
J16-P2	SHLD CC 39	CC 39A	0 VDC IMU	
J16-P2	SHLD CC 40	CC 40A	0 VDC IMU	
J16-P3	TB1-H18	CC142R	MG CDU MDA OUTPUT	
J16-P4	TB1-B 5	CC160W	IMU RSVR EXC 800 CPS 28 V 1 PCT LO IMU	
J16-P5	J18-T1	BB 89R	800 CPS 28 V 1 PCT HI OPTICS	

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J16-P5	TB1-D 5	CC161W	800 CPS 28 V 1 PCT HI OPTICS
J16-P5	TB1-A72	CC172W	800 CPS 28 V 1 PCT HI OPTICS
J16-P6	J20-H6	BB 92R	800 CPS 28 V 5 PCT L-90 DEG HI OPTICS
J16-P6	TB1-D 8	CC162R	800 CPS 28 V 5 PCT L-90 DEG HI OPTICS
J16-P6	TB1-A74	CC174R	800 CPS 28 V 5 PCT L-90 DEG HI OPTICS
J16-R1	TB1-K18	CC137W	IG CDU MDA OUTPUT
J16-R2	TB1-D58	CC175W	0 VDC IMU
J16-R2	TB1-F75	CC177	0 VDC IMU
J16-R2	J12-G5	BB 56	0 VDC IMU
J16-R3	TB1-H19	CC142W	MG CDU MDA OUTPUT
J16-R4	TB1-B 6	CC160K	ZEROING RSVR 800 CPS
J16-R5	TB1-K53	CC178	0 VDC OPTICS
J16-R6	TB1-G53	CC179	0 VDC OPTICS
J16-S1	TB1-C53	CC149	+28 VDC IMU FOR IG MDA
J16-S2	J20-L2	BB 93	+28 VDC IMU
J16-S2	J15-S6	BB 87	+28 VDC IMU
J16-S3	J20-F8	BB 97W	800 CPS 28 V 1 PCT LO IMU
J16-S3	TB1-B 7	CC160R	800 CPS 28 V 1 PCT LO IMU
J16-S3	J15-P5	BB 86W	800 CPS 28 V 1 PCT LO IMU
J16-S4	J20-F9	BB 97R	800 CPS 28 V 1 PCT HI IMU
J16-S4	TB1-A 5	CC160L	800 CPS 28 V 1 PCT HI IMU
J16-S4	J15-P6	BB 86R	800 CPS 28 V 1 PCT HI IMU
J16-S5	J20-P5	BB 90	+28 VDC OPTICS
J16-S5	J16-S6	BB 96	+28 VDC OPTICS
J16-S6	J20-P6	BB 91	+28 VDC OPTICS
J16-S6	J16-S5	BB 96	+28 VDC OPTICS
J16-T1	TB1-C52	CC150	+28 VDC IMU FOR MG MDA
J16-T2	TB1-C51	CC151	+28 VDC IMU FOR OG MDA
J17-A1	J11-C3	BB 10W	OG CDU ATTITUDE STEERING ERROR
J17-A2	TB1-G31	CC204W	OG CDU 16X ERROR SIG

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J17-A3	J22- 83	CC 47R	ROLL ERROR BODY OFFSET AXIS HI
J17-A4	J22- 74	CC 43R	ROLL ERROR BODY AXIS HI
J17-A6	TB1-B35	CC202L	TRUNNION CDU ENCODER PHASE 1
J17-A7	TB1-B34	CC202W	TRUNNION CDU ENCODER COMMON
J17-A8	TB1-B33	CC202R	TRUNNION CDU ENCODER PHASE 2
J17-A9	J17-B9	BB112	TRUNNION ENCODER SCALE SELECT
J17-B1	J11-B3	BB 10R	OG CDU ERROR SIG RET
J17-B2	TB1-G30	CC204R	OG CDU ERROR SIG RET
J17-B3	J22- 82	CC 47W	ROLL ERROR BODY OFFSET AXIS LO
J17-B4	J22- 75	CC 43W	ROLL ERROR BODY AXIS LO
J17-B5	TB1-H64	CC191W	IRIG TEMP CONT SENSOR RET
J17-B6	TB1-H63	CC191R	IRIG TEMP CONT SENSOR HI
J17-B7	TB1-K59	CC184W	IMU TEMP CONT -5 DEG GAIN CHECK
J17-B8	TB1-K61	CC184L	IRIG ZERO DEVIATION CHECK
J17-B9	J17-A9	BB112	TRUNNION ENCODER SCALE SELECT
J17-C1	J22- 79	CC 48W	PITCH ERROR BODY AND BODY OFFSET AXIS LO
J17-C1	TB1-G13	CC201W	PITCH ERROR BODY AND BODY OFFSET AXIS LO
J17-C2	TB1-F13	CC201R	PITCH-YAW RSVR S4
J17-C3	J22- 53	CC 45R	YAW ERROR BODY OFFSET AXIS HI
J17-C4	J22- 49	CC 44R	YAW ERROR BODY AXIS HI
J17-C5	TB1-K64	CC198W	IRIG TEMP IND SENSOR RET
J17-C6	TB1-K63	CC198R	IRIG TEMP IND SENSOR HI
J17-C7	TB1-K62	CC184K	IRIG TEMP BRIDGE AMP PIN 6
J17-C8	TB1-K60	CC184R	IRIG TEMP GAIN SWITCH NC
J17-C9	TB1-A35	CC203L	SHAFT CDU ENCODER PHASE 1
J17-D1	J22- 78	CC 48R	PITCH ERROR BODY AND BODY OFFSET AXIS HI
J17-D2	TB1-H13	CC182R	PITCH YAW RSVR S3
J17-D3	J22- 81	CC 45W	YAW ERROR BODY OFFSET AXIS LO
J17-D3	TB1-K13	CC182W	YAW ERROR BODY OFFSET AXIS LO
J17-D4	J22- 76	CC 44W	YAW ERROR BODY AXIS LO
J17-D5	TB1-G61	CC185W	ACCEL TEMP IND SENSOR RET
J17-D6	TB1-G64	CC185L	IMU IMU TEMP CONT +5 DEG GAIN CHECK

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J17-D7	TB1-G63	CC185R	ACCEL ZERO DEVIATION CHECK	
J17-D9	TB1-A34	CC203W	SHAFT CDU ENCODER COMMON	
J17-F2	TB1-C64	CC205	TEMPERATURE CONTROL SIG LO	
J17-F3	TB1-B64	CC'96	HTR CURRENT (TELEMETRY)	
J17-F4	TB1-D64	CC195	IRIG TEMP (TELEMETRY)	
J17-F5	TB1-F64	CC194	ACCEL TEMP (TELEMETRY)	
J17-F6	TB1-A64	CC193	BLOWER CURRENT SENSOR (TELEMETRY)	
J17-F7	TB1-G62	C 185K	ACCEL BRIDGE AMP PIN 6	
J17-F9	TB1-A33	CC203R	SHAFT CDU ENCODER PHASE 2	
J17-G1	TB1-F59	C 188	IMU TEMP ALARM AMP PIN 14	
J17-G2	TB1-F60	(187R	IMU TEMP ALARM AMP PIN 15	
J17-G4	J18-G4	BB107L	SHAFT ENCODER + DELTA THETA OUTPUT	
J17-G4	J24- 59	CC 50R	SHAFT ENCODER + DELTA THETA OUTPUT	108S
J17-G6	J18-G6	BB101L	TRUNNION ENCODER + DELTA THETA OUTPUT	
J17-G6	J24- 61	CC 42R	TRUNNION ENCODER + DELTA THETA OUT	110S
J17-H1	TB1-F61	CC187L	IMU TEMP ALARM BIAS RESISTOR	
J17-H2	TB1-F62	CC187W	IMU TEMP ALARM AMP PIN 5	
J17-H4	J18-H4	BB107W	SHAFT ENCODER DELTA THETA OUT COMMON	
J17-H4	J24- 35	CC 46W	SHAFT ENCODER DELTA THETA OUT COMMON	109R
J17-H4	J24- 58	CC 50W	SHAFT ENCODER DELTA THETA OUT COMMON	108R
J17-H6	J18-H6	BB101W	TRUNNION ENCODER DELTA THETA OUT COM	
J17-H6	J24- 60	CC 42W	TRUNNION ENCODER DELTA THETA OUT COM	110R
J17-H6	J24- 37	CC 49W	TRUNNION ENCODER DELTA THETA OUT COM	111R
J17-K4	J18-K4	BB107R	SHAFT ENCODER - DELTA THETA OUTPUT	
J17-K4	J24- 36	CC 46R	SHAFT ENCODER - DELTA THETA OUTPUT	109S
J17-K6	J18-K6	BB101R	TRUNNION ENCODER - DELTA THETA OUTPUT	
J17-K6	J24- 38	CC 49R	TRUNNION ENCODER - DELTA THETA OUT	111S
J17-L1	TB1-D63	CC189W	IMU TEMP CONT K2 PIN 6	
J17-L3	J22- 38	CC347	IMU TEMP LIGHT (MAIN PANEL)	
J17-L4	TB1-B63	CC206W	+32, +120 VDC RET PIP	
J17-L4	J14-R1	BB 79W	+32, +120 VDC RET PIP	
J17-L5	TB1-A63	CC206R	+120 VDC PIP	

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J17-L5	J14-S1	BB 79R	+120 VDC PIP	
J17-L6	J18-P4	BB100	STRUCTURE GROUND	
J17-L6	TB1-G70	CC207	STRUCTURE GROUND	
J17-L6	J16-N4	BB 95	STRUCTURE GROUND	
J17-M1	TB1-F63	CC189R	TEMPERATURE CONTROLLER 0 VDC IMU	
J17-M2	TB1-H61	CC199	IMU TEMP SENSOR COM	
J17-M3	TB1-D70	CC200	0 VDC SPACECRAFT	
J17-M3	J22- 39	CC346	0 VDC SPACECRAFT	
J17-M3	J12-F3	BB 52	0 VDC SPACECRAFT	
J17-M4	TB1-C60	CC190W	IMU EMERGENCY HTR HI	
J17-M5	TB1-H59	CC186W	IMU TEMP CONT K1 PIN 3	
J17-M6	TB1-H60	CC186R	IMU TEMP CONT AMP PIN 5	
J17-N1	TB1-D61	CC192W	IMU CONTROL HTR LO	
J17-N2	J11-P1	BB 11L	3200 CPS 20 V HI	
J17-N3	J12-N6	BB 51W	25.6 KC LO OPTICS	
J17-N4	TB1-C61	CC190R	EMERGENCY HTR LO-OPER AND STBY	
J17-N5	TB1-G60	CC186L	IMU TEMP CONT K2 PIN 5	
J17-N6	TB1-G59	CC186K	IMU HTR CURRENT AMP PIN 5	
J17-P1	TB1-D60	CC192R	IMU CONTROL HTR HI	
J17-P2	J11-N1	BB 11R	3200 CPS 20 V CT	
J17-P3	J12-P6	BB 51R	25.6 KC HI OPTICS	
J17-P4	TB1-C77	CC183R	800 CPS 28 V 5 PCT HI TO BLOWERS	
J17-P5	TB1-B26	CC197	IMU TEMP CONT FAIL LIGHT HI	
J17-P6	TB1-D71	CC181	CONDITION LAMP TEST	
J17-R1	J11-S3	BB 12	+28 VDC STBY TO 3200 CPS POWER SUPPLY	
J17-R2	J11-N2	BB 11W	3200 CPS 20 V LO	
J17-R3	J23- 28	CC 51R	COMPUTER 12.8 KPPS SYNC	155S
J17-R3	J12-P4	BB 50W	COMPUTER 12.8 KPPS SYNC	
J17-R4	TB1-C75	CC183W	800 CPS 28 V 5 PCT L-90 DEG HI IMU	
J17-R5	J20-M5	BB106	+28 VDC MDV	
J17-R6	TB1-F76	CC208	0 VDC OPTICS	
J17-S1	J17-S2	BB113	0 VDC IMU	

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J17-S1	TB1-D75	CC209	0 VDC IMU	
J17-S2	TB1-D74	CC210	0 VDC IMU	
J17-S2	J17-S1	BB113	0 VDC IMU	
J17-S3	J23- 49	CC 51W	0 VDC IMU	155R
J17-S3	TB1-B69	CC211	0 VDC IMU	
J17-S4	SHLD BB 50	BB 50B	0 VDC IMU	
J17-S4	TB1-B70	CC212	0 VDC IMU	
J17-S4	SHLD CC 51	CC 51A	0 VDC IMU	
J17-S6	TB1-D76	CC213	0 VDC OPTICS	
J17-T1	J20-R3	BB104	+28 VDC STBY	
J17-T1	J17-T2	BB110	+28 VDC STBY	
J17-T2	J20-R4	BB105	+28 VDC STBY	
J17-T2	J17-T1	BB110	+28 VDC STBY	
J17-T3	J20-M2	BB103	+28 VDC IMU	
J17-T4	J20-M1	BB102	+28 VDC IMU	
J17-T5	TB1-C63	CC206L	+32 VDC PIP	
J17-T5	J14-S4	BB 79L	+32 VDC PIP	
J17-T6	J20-N6	BB111	+28 VDC OPTICS	
J18-A1	TB1-D46	CC218W	SXT SHAFT 1/2X RSVR S3	
J18-A2	TB1-B46	CC219W	SXT SHAFT 16X RSVR S4	
J18-A3	TB1-B45	CC219R	SXT SHAFT 16X RSVR S2	
J18-A5	TB1-K37	CC237R	SCT SHAFT TACH HI	
J18-A7	TB1-H37	CC239R	SXT SHAFT TACH HI	
J18-A9	TB1-D37	CC233R	SXT TRUNNION TACH HI	
J18-B1	TB1-D45	CC218R	SXT SHAFT 1/2X RSVR S1	
J18-B5	TB1-K38	CC237W	SCT SHAFT TACH LO	
J18-B7	TB1-H38	CC239W	SXT SHAFT TACH LO	
J18-B9	TB1-D38	CC233W	SXT TRUNNION TACH LO	
J18-C1	TB1-B43	CC234R	SXT TRUNNION 64X RSVR S2	
J18-C2	TB1-B44	CC234W	SXT TRUNNION 64X RSVR S4	

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FROM	TO	COND NO	CIRCUIT FUNCTION	
J18-C5	TB1-K41	CC235R	SCT SHAFT 1X RSVR S2	
J18-C7	TB1-G55	CC226	TRACKER X DRIVE BUFFERED HI	
J18-C8	TB1-G54	CC227	TRACKER Y DRIVE BUFFERED HI	
J18-C9	TB1-G56	CC228	TRACKER PREAMP OUTPUT BUFFERED HI	
J18-D1	TB1-C43	CC230W	TRUNNION CDU 1/4X RSVR S4	
J18-D3	TB1-G44	CC221W	SCT TRUNNION 1X RSVR P1	
J18-D4	TB1-G43	CC221R	SCT TRUNNION 1X RSVR P3	
J18-D5	TB1-K40	CC235W	SCT SHAFT 1X RSVR S4	
J18-D7	J18-D8	BB120	0 VDC OPTICS	
J18-D7	J18-L1	BB122	0 VDC OPTICS	
J18-D8	J18-D9	BB121	0 VDC OPTICS	
J18-D8	J18-D7	BB120	0 VDC OPTICS	
J18-D9	J18-D8	BB121	0 VDC OPTICS	
J18-F1	TB1-C44	CC230R	TRUNNION CDU 1/4X RSVR S2	
J18-F2	TB1-D44	CC229W	TRUNNION CDU 1/4X RSVR S1	
J18-F3	TB1-D43	CC229R	TRUNNION CDU 1/4X RSVR S3	
J18-F4	TB1-F44	CC231R	SCT TRUNNION 1X RSVR P2	
J18-F5	TB1-F43	CC231W	SCT TRUNNION 1X RSVR P4	
J18-G1	J19-G6	BB118R	SXT SHAFT MDA INPUT HI	
J18-G2	J19-G5	BB118W	SXT SHAFT MDA INPUT LO	
J18-G3	J23- 37	CC 55R	SHAFT + DELTA THETA COMMAND	114S
J18-G4	J17-G4	BB107L	SHAFT ENCODER + DELTA THETA OUTPUT	
J18-G5	J23- 89	CC 52R	TRUNNION + DELTA THETA COMMAND	116S
J18-G6	J17-G6	BB101L	TRUNNION ENCODER + DELTA THETA OUTPUT	
J18-H1	J19-H6	BB119W	SXT TRUNNION MDA INPUT LO	
J18-H3	J23- 19	CC 53W	SHAFT DELTA THETA COMMAND COMMON	115R
J18-H3	J23- 36	CC 55W	SHAFT DELTA THETA COMMAND COMMON	114R
J18-H4	J17-H4	BB107W	SHAFT ENCODER DELTA THETA OUT COMMON	
J18-H5	J23- 88	CC 52W	TRUNNION DELTA THETA COMMAND COMMON	116R
J18-H5	J23- 59	CC 54W	TRUNNION DELTA THETA COMMAND COMMON	117R
J18-H6	J17-H6	BB101W	TRUNNION ENCODER DELTA THETA OUT COM	
J18-K1	J19-K6	BB119R	SXT TRUNNION MDA INPUT HI	

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FROM	TO	COND NO	CIRCUIT FUNCTION	
J18-K3	J23- 20	CC 53R	SHAFT - DELTA THETA COMMAND	115S
J18-K4	J17-K4	BB107R	SHAFT ENCODER - DELTA THETA OUTPUT	
J18-K5	J23- 60	CC 54R	TRUNNION - DELTA THETA COMMAND	117S
J18-K6	J17-K6	BB101R	TRUNNION ENCODER - DELTA THETA OUTPUT	
J18-L1	J18-L2	BB123	0 VDC OPTICS	
J18-L1	J19-L6	BB131	0 VDC OPTICS	
J18-L1	J18-D7	BB122	0 VDC OPTICS	
J18-L2	J18-L3	BB124	0 VDC OPTICS	
J18-L2	J18-L1	BB123	0 VDC OPTICS	
J18-L3	J18-L4	BB125	0 VDC OPTICS	
J18-L3	J18-L2	BB124	0 VDC OPTICS	
J18-L4	J18-L5	BB126	0 VDC OPTICS	
J18-L4	J18-L3	BB125	0 VDC OPTICS	
J18-L5	J18-L6	BB127	0 VDC OPTICS	
J18-L5	J18-L4	BB126	0 VDC OPTICS	
J18-L6	J18-L5	BB127	0 VDC OPTICS	
J18-M1	TB1-H56	CC222	SXT TRUNNION MDA INPUT BUFFERED	
J18-M2	TB1-H55	CC220	SXT TRUNNION TACH FEEDBACK BUFFERED	
J18-M3	TB1-K56	CC214	SXT SHAFT MDA INPUT BUFFERED	
J18-M4	TB1-K55	CC215	SXT SHAFT TACH FEEDBACK BUFFERED	
J18-M5	TB1-H54	CC217	SCT SHAFT 1X ERROR SIG BUFFERED	
J18-M6	TB1-K54	CC216	SCT SHAFT TACH FEEDBACK BUFFERED	
J18-P1	TB1-B60	CC225R	ZERO OPTICS MODE COMMAND	
J18-P2	TB1-B57	CC223W	0 DEG OFFSET RELAY COMMAND	
J18-P3	TB1-B59	CC225W	COMPUTER RELAY COMMAND	
J18-P4	J19-R4	BB115	STRUCTURE GROUND	
J18-P4	J17-L6	BB100	STRUCTURE GROUND	
J18-R1	J19-R6	BB116	TRACKER MODE RELAY COMMAND	
J18-R2	TB1-B58	CC223R	25 DEG OFFSET RELAY COMMAND	
J18-R4	J18-R5	BB128	0 VDC OPTICS	
J18-R4	J18-S3	BB130	0 VDC OPTICS	
J18-R4	TB1-F77	CC241	0 VDC OPTICS	

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FROM	TO	COND NO	CIRCUIT FUNCTION
J18-R5	J18-R6	BB129	0 VDC OPTICS
J18-R5	J18-R4	BB128	0 VDC OPTICS
J18-R6	TB1-D77	CC240	0 VDC OPTICS
J18-R6	J18-R5	BB129	0 VDC OPTICS
J18-S1	J19-S6	BB117W	800 CPS 28 V 1 PCT LO OPTICS
J18-S1	J16-N5	BB 89W	800 CPS 28 V 1 PCT LO OPTICS
J18-S3	J18-R4	BB130	0 VDC OPTICS
J18-S4	TB1-H51	CC236R	SCT SHAFT MOTOR PHASE 2
J18-S5	TB1-G49	CC238R	SXT SHAFT MOTOR PHASE 2
J18-S6	TB1-G51	CC232R	SXT TRUNNION MOTOR PHASE 2
J18-T1	J19-T6	BB117R	800 CPS 28 V 1 PCT HI OPTICS
J18-T1	J16-P5	BB 89R	800 CPS 28 V 1 PCT HI OPTICS
J18-T2	J20-N6	BB114	+28 VDC OPTICS
J18-T3	TB1-C71	CC224	+28 VDC OPTICS DAC POWER
J18-T4	TB1-H52	CC236W	SCT SHAFT MOTOR PHASE 1
J18-T5	TB1-G48	CC238W	SXT SHAFT MOTOR PHASE 1
J18-T6	TB1-G52	CC232W	SXT TRUNNION MOTOR PHASE 1
J19-A1	TB1-F37	CC261R	SCT TRUNNION TACH HI
J19-A6	TB1-C37	CC258R	TRUNNION CDU TACHOMETER HI
J19-A9	TB1-G37	CC269R	SHAFT CDU TACH HI
J19-B1	TB1-F38	CC261W	SCT TRUNNION TACH LO
J19-B4	TB1-C41	CC256R	TRUNNION CDU 16X RSVR S3
J19-B5	TB1-C40	CC256W	TRUNNION CDU 16X RSVR S2
J19-B6	TB1-C38	CC258W	TRUNNION CDU TACHOMETER LO
J19-B7	TB1-G41	CC267R	SHAFT CDU 16X RSVR S3
J19-B8	TB1-G40	CC267W	SHAFT CDU 16X RSVR S2
J19-B9	TB1-G38	CC269W	SHAFT CDU TACH LO
J19-C1	TB1-F40	CC259W	SCT TRUNNION 1X RSVR S2
J19-C2	TB1-F41	CC259R	SCT TRUNNION 1X RSVR S4
J19-C5	TB1-D40	CC255R	TRUNNION CDU 1/4X RSVR P2

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J19-C6	TB1-D41	CC255W	TRUNNION CDU 1/4X RSVR P3
J19-C8	TB1-H40	CC263W	SHAFT CDU 1/2X RSVR P1
J19-C9	TB1-H41	CC263R	SHAFT CDU 1/2X RSVR P3
J19-D2	TB1-F69	CC262W	SCT TRUNNION TRACKER MODE INPUT LO
J19-D3	TB1-F68	CC262R	SCT TRUNNION TRACKER MODE INPUT HI
J19-D7	TB1-H69	CC250W	SHAFT HAND CONTROLLER OUTPUT LO
J19-D8	TB1-H68	CC250R	SHAFT HAND CONTROLLER OUTPUT HI
J19-F8	TB1-K69	CC249W	TRUNNION HAND CONTROLLER OUTPUT LO
J19-F9	TB1-K68	CC249R	TRUNNION HAND CONTROLLER OUTPUT HI
J19-G1	TB1-K44	CC253R	TRUNNION CDU 1/2X RSVR S1
J19-G3	TB1-K45	CC266W	SHAFT CDU 1X RSVR P4
J19-G4	J20-D9	BB133R	Y TRACKER OUTPUT LO
J19-G4	TB1-K46	CC266R	SHAFT CDU 1X RSVR P2
J19-G5	J18-G2	BB118W	SXT SHAFT MDA INPUT LO
J19-G6	J18-G1	BB118R	SXT SHAFT MDA INPUT HI
J19-H1	TB1-K43	CC253W	TRUNNION CDU 1/2X RSVR S3
J19-H4	J20-C9	BB133W	Y TRACKER OUTPUT HI
J19-H5	J20-C8	BB132W	X TRACKER OUTPUT HI
J19-H6	J18-H1	BB119W	SXT TRUNNION MDA INPUT LO
J19-K1	TB1-H44	CC254R	TRUNNION CDU 1/2X RSVR S2
J19-K2	TB1-H43	CC254W	TRUNNION CDU 1/2X RSVR S4
J19-K4	TB1-H46	CC265W	SHAFT CDU 1X RSVR P1
J19-K5	J20-D8	BB132R	X TRACKER OUTPUT LO
J19-K5	TB1-H45	CC265R	SHAFT CDU 1X RSVR P3
J19-K6	J18-K1	BB119R	SXT TRUNNION MDA INPUT HI
J19-L1	J20-B7	BB135	0 VDC OPTICS
J19-L1	J19-L2	BB136	0 VDC OPTICS
J19-L2	J19-L3	BB137	0 VDC OPTICS
J19-L2	J19-L1	BB136	0 VDC OPTICS
J19-L3	J19-L4	BB138	0 VDC OPTICS
J19-L3	J19-L2	BB137	0 VDC OPTICS
J19-L4	J19-L5	BB139	0 VDC OPTICS

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FROM	TO	COND NO	CIRCUIT FUNCTION
J19-L4	J19-L3	BB138	0 VDC OPTICS
J19-L5	J19-L6	BB140	0 VDC OPTICS
J19-L5	J19-L4	BB139	0 VDC OPTICS
J19-L6	TB1-F56	CC270	0 VDC OPTICS
J19-L6	J18-L1	BB131	0 VDC OPTICS
J19-L6	J19-L5	BB140	0 VDC OPTICS
J19-M1	TB1-G57	CC243	CDU TRUNNION 16X RSVR ERROR SIG BUFFERED
J19-M2	TB1-H57	CC244	TRUNNION CDU TACH FEEDBACK BUFFERED
J19-M3	TB1-H58	CC242	SHAFT CDU 16X ERROR SIG BUFFERED
J19-M4	TB1-G58	CC248	SHAFT CDU TACH FEEDBACK SIG BUFFERED
J19-M5	TB1-K57	CC245	SCT TRUNNION 1X ERROR SIG BUFFERED
J19-M6	TB1-F58	CC246	SCT TRUNNION TACH FEEDBACK BUFFERED
J19-N1	TB1-D50	CC257L	CDU TRUNNION MDA TUNING CAPACITOR
J19-N2	TB1-D49	CC268L	CDU SHAFT MDA TUNING CAPACITOR
J19-P1	TB1-B19	CC252R	TRUNNION CDU 1/2X RSVR P3
J19-P2	TB1-B18	CC252W	TRUNNION CDU 1/2X RSVR P2
J19-P3	TB1-F48	CC264L	SHAFT CDU 1X RSVR S2
J19-P4	TB1-F49	CC264R	SHAFT CDU 1X RSVR S3
J19-P5	TB1-F50	CC264W	SHAFT CDU 1X RSVR S1
J19-P6	TB1-A57	CC251R	RESOLVED MODE RELAY COMMAND
J19-R1	J19-R2	BB141	0 VDC OPTICS
J19-R1	TB1-F78	CC271	0 VDC OPTICS
J19-R2	J19-R3	BB142	0 VDC OPTICS
J19-R2	J19-R1	BB141	0 VDC OPTICS
J19-R3	J19-S4	BB143	0 VDC OPTICS
J19-R3	TB1-D78	CC272	0 VDC OPTICS
J19-R3	J19-R2	BB142	0 VDC OPTICS
J19-R4	J20-M4	BB134	STRUCTURE GROUND
J19-R4	J18-P4	BB115	STRUCTURE GROUND
J19-R6	TB1-A61	CC251W	TRACKER MODE RELAY COMMAND
J19-R6	J18-R1	BB116	TRACKER MODE RELAY COMMAND
J19-S1	TB1-K48	CC257W	TRUNNION CDU MOTOR PHASE 1

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FROM	TO	COND NO	CIRCUIT FUNCTION	
J19-S2	TB1-H48	CC268W	SHAFT CDU MOTOR PHASE 1	
J19-S3	TB1-K52	CC260W	SCT TRUNNION MOTOR PHASE 1	
J19-S4	J19-S5	BB144	0 VDC OPTICS	
J19-S4	J19-R3	BB143	0 VDC OPTICS	
J19-S5	J19-S4	BB144	0 VDC OPTICS	
J19-S6	J18-S1	BB117W	800 CPS 28 V 1 PCT LO OPTICS	
J19-T1	TB1-K49	CC257R	TRUNNION CDU MOTOR PHASE 2	
J19-T2	TB1-H49	CC268R	SHAFT CDU MOTOR PHASE 2	
J19-T3	TB1-K51	CC260R	SCT TRUNNION MOTOR PHASE 2	
J19-T5	TB1-H71	CC247	+28 VDC OPTICS	
J19-T6	J18-T1	BB117R	800 CPS 28 V 1 PCT HI OPTICS	
J20-A4	TB1-D68	CC286R	IMU PRESSURE MONITOR HI	
J20-A6	TB1-K74	CC310R	PRESSURE SENSOR +28 VDC HI	
J20-A7	TB1-H66	CC277R	STAR PRESENCE INPUT HI	
J20-A8	TB1-H65	CC277W	STAR PRESENCE INPUT LO	
J20-A9	TB1-K66	CC278R	PHOTOMETER SIGNAL HI	
J20-B4	TB1-D69	CC286W	IMU PRESSURE MONITOR LO	
J20-B6	TB1-K73	CC310W	PRESSURE SENSOR +28 VDC LO	
J20-B7	J19-L1	BB135	0 VDC OPTICS	
J20-B8	TB1-K58	CC282	PHOTOMETER PREAMP OUTPUT BUFFERED HI	
J20-B9	TB1-K65	CC278W	PHOTOMETER SIGNAL LO	
J20-C3	J24- 16	CC 56W	STAR PRESENCE LO	183R
J20-C4	J24- 17	CC 56R	STAR PRESENCE HI	183S
J20-C6	TB1-G66	CC274R	TRACKER X ERROR HI	
J20-C7	TB1-G65	CC274W	TRACKER X ERROR LO	
J20-C8	J19-H5	BB132W	X TRACKER OUTPUT HI	
J20-C9	J19-H4	BB133W	Y TRACKER OUTPUT HI	
J20-D1	TB1-F71	CC309R	+2.5 VDC CONDITIONING HI	
J20-D3	J23- 75	CC 57W	102.4 KPPS INPUT LO	056R
J20-D4	TB1-G74	CC292	+13 VDC AGC	

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FROM	TO	COND NO	CIRCUIT FUNCTION	
J20-D6	TB1-F66	CC275R	TRACKER Y ERROR HI	
J20-D7	TB1-F65	CC275W	TRACKER Y ERROR LO	
J20-D8	J19-K5	BB132R	X TRACKER OUTPUT LO	
J20-D9	J19-G4	BB133R	Y TRACKER OUTPUT LO	
J20-F1	TB1-F70	CC309W	+2.5 VDC CONDITIONING LO	
J20-F2	TB1-B61	CC276W	AUTOMATIC MARK COMMAND	
J20-F3	J23- 74	CC 57R	102.4 KPPS INPUT HI	056S
J20-F4	TB1-G73	CC293	+3 VDC AGC	
J20-F5	TB1-H74	CC289	+28 VDC AGC	
J20-F6	TB1-G68	CC281R	PHOTOMETER MARK REJECT HI	
J20-F7	TB1-G69	CC281W	PHOTOMETER MARK REJECT LO	
J20-F8	J22- 73	CC 59W	800 CPS 28 V 1 PCT LO IMU	
J20-F8	J16-S3	BB 97W	800 CPS 28 V 1 PCT LO IMU	
J20-F9	J22- 72	CC 59R	800 CPS 28 V 1 PCT HI IMU	
J20-F9	J16-S4	BB 97R	800 CPS 28 V 1 PCT HI IMU	
J20-G1	TB1-F72	CC294W	0 VDC CONDITIONING	
J20-G2	TB1-G72	CC294R	+20 VDC CONDITIONING	
J20-G3	TB1-H73	CC291	0 VDC AGC	
J20-G4	J20-G5	BB145	800 CPS 28 V 1 PCT LO OPTICS	
J20-G5	TB1-B73	CC273R	800 CPS 28 V 1 PCT LO OPTICS	
J20-G5	J20-G4	BB145	800 CPS 28 V 1 PCT LO OPTICS	
J20-G6	TB1-A73	CC273W	800 CPS 28 V 1 PCT HI OPTICS	
J20-H1	J20-K1	BB161	0 VDC IMU	
J20-H1	TB1-F75	CC320	0 VDC IMU	
J20-H2	TB1-K78	CC287	+28 VDC AGC BUSS A	
J20-H3	TB1-K77	CC288	+28 VDC AGC BUSS B	
J20-H4	TB1-A71	CC273L	800 CPS 28 V 1 PCT HI OPTICS TRACKER PWR	
J20-H5	J16-N6	BB 92W	800 CPS 28 V 5 PCT L-90 DEG LO OPTICS	
J20-H6	J16-P6	BB 92R	800 CPS 28 V 5 PCT L-90 DEG HI OPTICS	
J20-K1	J20-K2	BB162	0 VDC IMU	
J20-K1	TB1-F73	CC321	0 VDC IMU	
J20-K1	J20-H1	BB161	0 VDC IMU	

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J20-K2	TB1-C68	CC322	0 VDC IMU
J20-K2	J20-K1	BB162	0 VDC IMU
J20-K5	J20-L5	BB147	800 CPS 28 V 5 PCT L-90 DEG LO IMU
J20-K5	J12-K4	BB 33W	800 CPS 28 V 5 PCT L-90 DEG LO IMU
J20-K6	J20-L6	BB146	800 CPS 28 V 5 PCT L-90 DEG HI IMU
J20-K6	J12-H4	BB 33R	800 CPS 28 V 5 PCT L-90 DEG HI IMU
J20-L1	TB1-G 7	CC306	+28 VDC IMU
J20-L1	TB1-G71	CC307	+28 VDC IMU
J20-L1	J15-S2	BB 81	+28 VDC IMU
J20-L2	TB1-G71	CC308	+28 VDC IMU
J20-L2	J11-S5	BB 4	+28 VDC IMU
J20-L2	J16-S2	BB 93	+28 VDC IMU
J20-L5	TB1-C76	CC285W	800 CPS 28 V 5 PCT L-90 DEG LO IMU
J20-L5	J20-K5	BB147	800 CPS 28 V 5 PCT L-90 DEG LO IMU
J20-L6	TB1-C75	CC285R	800 CPS 28 V 5 PCT L-90 DEG HI IMU
J20-L6	J20-K6	BB146	800 CPS 28 V 5 PCT L-90 DEG HI IMU
J20-M1	J20-N1	BB152	+28 VDC IMU
J20-M1	J12-S1	BB 35	+28 VDC IMU
J20-M1	J17-T4	BB102	+28 VDC IMU
J20-M2	J20-N2	BB154	+28 VDC IMU
J20-M2	J12-S2	BB 36	+28 VDC IMU
J20-M2	J17-T3	BB103	+28 VDC IMU
J20-M3	TB1-C78	CC311W	400 CPS 115 V LO
J20-M4	J19-R4	BB134	STRUCTURE GROUND
J20-M4	SHLD CC 57	CC 57A	STRUCTURE GROUND
J20-M5	TB1-K72	CC284	+28 VDC MDV
J20-M5	J17-R5	BB106	+28 VDC MDV
J20-M6	J12-G4	BB 34	+28 VDC IMU FOR 800 CPS 5 PCT MTR PWRAMP
J20-N1	J20-N2	BB153	+28 VDC IMU
J20-N1	J11-S1	BB 2	+28 VDC IMU
J20-N1	J20-M1	BB152	+28 VDC IMU
J20-N2	J11-S2	BB 3	+28 VDC IMU

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FROM	TO	COND NO	CIRCUIT FUNCTION	
J20-N2	J20-N1	BB153	+28 VDC IMU	
J20-N2	J20-M2	BB154	+28 VDC IMU	
J20-N3	TB1-B78	CC311R	400 CPS 115 V HI	
J20-N4	TB1-B71	CC280	+28 VDC OPTICS TRACKER POWER	
J20-N5	J23- 47	CC 58	+28 VDC MDV	157R
J20-N5	TB1-K71	CC283	+28 VDC MDV	
J20-N5	J12-L1	BB 46	+28 VDC MDV	
J20-N6	TB1-H71	CC279	+28 VDC OPTICS	
J20-N6	J17-T6	BB111	+28 VDC OPTICS	
J20-N6	J18-T2	BB114	+28 VDC OPTICS	
J20-P1	J20-T1	BB148	+28 VDC IMU BUSS A	
J20-P1	TB1-H76	CC313	+28 VDC IMU BUSS A	
J20-P2	J20-T2	BB150	+28 VDC IMU BUSS B	
J20-P2	TB1-H75	CC315	+28 VDC IMU BUSS B	
J20-P3	TB1-D78	CC323	0 VDC OPTICS	
J20-P4	TB1-F78	CC324	0 VDC OPTICS	
J20-P5	J12-S6	BB 32	+28 VDC OPTICS	
J20-P5	J16-S5	BB 90	+28 VDC OPTICS	
J20-P6	J16-S6	BB 91	+28 VDC OPTICS	
J20-R1	J20-S1	BB149	+28 VDC IMU BUSS A	
J20-R1	TB1-K76	CC312	+28 VDC IMU BUSS A	
J20-R2	J20-S2	BB151	+28 VDC IMU BUSS B	
J20-R2	TB1-K75	CC314	+28 VDC IMU BUSS B	
J20-R3	TB1-H72	CC301	+28 VDC STBY	
J20-R3	J17-T1	BB104	+28 VDC STBY	
J20-R4	J17-T2	BB105	+28 VDC STBY	
J20-R5	J20-T5	BB157	+28 VDC OPTICS BUSS A	
J20-R5	J20-S5	BB158	+28 VDC OPTICS BUSS A	
J20-R5	TB1-G78	CC318	+28 VDC OPTICS BUSS A	
J20-R6	J20-T6	BB159	+28 VDC OPTICS BUSS B	
J20-R6	J20-S6	BB160	+28 VDC OPTICS BUSS B	
J20-R6	TB1-G77	CC319	+28 VDC OPTICS BUSS B	

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FROM	TO	COND NO	CIRCUIT FUNCTION	
J20-S1	TB1-H76	CC296	+28 VDC IMU BUSS A	
J20-S1	J20-R1	BB149	+28 VDC IMU BUSS A	
J20-S2	TB1-H75	CC298	+28 VDC IMU BUSS B	
J20-S2	J20-R2	BB151	+28 VDC IMU BUSS B	
J20-S3	J20-T3	BB155	+28 VDC STBY BUSS A	
J20-S3	TB1-G76	CC316	+28 VDC STBY BUSS A	
J20-S4	J20-T4	BB156	+28 VDC STBY BUSS B	
J20-S4	TB1-G75	CC317	+28 VDC STBY BUSS B	
J20-S5	TB1-H78	CC303	+28 VDC OPTICS BUSS A	
J20-S5	J20-R5	BB158	+28 VDC OPTICS BUSS A	
J20-S6	TB1-G77	CC305	+28 VDC OPTICS BUSS B	
J20-S6	J20-R6	BB160	+28 VDC OPTICS BUSS B	
J20-T1	TB1-K76	CC295	+28 VDC IMU BUSS A	
J20-T1	J20-P1	BB148	+28 VDC IMU BUSS A	
J20-T2	TB1-K75	CC297	+28 VDC IMU BUSS B	
J20-T2	J20-P2	BB150	+28 VDC IMU BUSS B	
J20-T3	TB1-G76	CC299	+28 VDC STBY BUSS A	
J20-T3	J20-S3	BB155	+28 VDC STBY BUSS A	
J20-T4	TB1-G75	CC300	+28 VDC STBY BUSS B	
J20-T4	J20-S4	BB156	+28 VDC STBY BUSS B	
J20-T5	TB1-G78	CC302	+28 VDC OPTICS BUSS A	
J20-T5	J20-R5	BB157	+28 VDC OPTICS BUSS A	
J20-T6	TB1-H77	CC304	+28 VDC OPTICS BUSS B	
J20-T6	J20-R6	BB159	+28 VDC OPTICS BUSS B	
J21- 1	E 29	A 429Y	COMMONED RETURNS GROUND	233R
J21- 2	E 28	A 425Y	COMMONED RETURNS GROUND	228R
J21- 3	J10- 44	A 430R	PARITY FAIL ALARM	234S
J21- 4	E 28	A 422Y	COMMONED RETURNS GROUND	244R
J21- 5	J10- 42	A 422R	TIMING (1.5 CPS)	244S
J21- 6	J10- 33	A 429R	SCALER FAIL ALARM	233S

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FROM	TO	COND NO	CIRCUIT FUNCTION	
J21- 7	J10- 18	A 425R	OUT 0 15	228S
J21- 8	J10- 14	A 444R	OUT 0 11	224S
J21- 9	E 33	A 444Y	COMMONED RETURNS GROUND	224R
J21- 10	J10- 40	A 426R	PROGRAM ALARM	229S
J21- 11	E 29	A 430Y	COMMONED RETURNS GROUND	234R
J21- 12	J10- 70	A 450	SPARE	211
J21- 13	E 26	A 467Y	COMMONED RETURNS GROUND	208R
J21- 14	J10- 48	A 467R	ERROR RESET	208S
J21- 15	E 27	A 459Y	COMMONED RETURNS GROUND	205R
J21- 16	E 30	A 434Y	COMMONED RETURNS GROUND	238R
J21- 17	E 28	A 423Y	COMMONED RETURNS GROUND	232R
J21- 18	E 28	A 424Y	COMMONED RETURNS GROUND	227R
J21- 19	E 32	A 443Y	COMMONED RETURNS GROUND	223R
J21- 20	E 32	A 440Y	COMMONED RETURNS GROUND	219R
J21- 21	J10- 31	A 446R	OUT 0 7	220S
J21- 22	E 33	A 446Y	COMMONED RETURNS GROUND	220R
J21- 23	J10- 15	A 447R	OUT 0 12	225S
J21- 24	E 28	A 426Y	COMMONED RETURNS GROUND	229R
J21- 25	J10- 43	A 431R	COUNTER FAIL ALARM	235S
J21- 26	J10- 71	A 449	POWER SUPPLY SYNC	212
J21- 27	J10- 47	A 465R	OR OF C1 THRU CB3	210S
J21- 28	E 26	A 466Y	COMMONED RETURNS GROUND	201R
J21- 29	J10- 34	A 466R	KEY CODE 1	201S
J21- 30	E 27	A 462Y	COMMONED RETURNS GROUND	207R
J21- 31	J10- 39	A 462R	TEST ALARM	207S
J21- 32	J10- 38	A 459R	KEY CODE 5	205S
J21- 33	J10- 64	A 434R	TC TRAP ALARM	238S
J21- 34	J10- 32	A 423R	PROGRAM CHECK FAIL ALARM	232S
J21- 35	J10- 17	A 424R	OUT 0 14	227S
J21- 36	J10- 63	A 443R	OUT 0 10	223S
J21- 37	J10- 30	A 440R	OUT 0 6	219S
J21- 38	J10- 74	A 436R	OUT 0 2	215S

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FROM	TO	COND NO	CIRCUIT FUNCTION	
J21- 39	E 31	A 436Y	COMMONED RETURNS GROUND	215R
J21- 40	J10- 60	A 437R	OUT 0 3	216S
J21- 41	E 31	A 437Y	COMMONED RETURNS GROUND	216R
J21- 42	J10- 61	A 441R	OUT 0 8	221S
J21- 43	E 33	A 447Y	COMMONED RETURNS GROUND	225R
J21- 44	J10- 41	A 427R	COMPUTER ACTIVITY	230S
J21- 45	E 29	A 431Y	COMMONED RETURNS GROUND	235R
J21- 46	J10- 72	A 448	SPARE	213
J21- 47	E 26	A 465Y	COMMONED RETURNS GROUND	210R
J21- 48	J10- 35	A 464R	KEY CODE 2	202S
J21- 50	E 35	A 556	GROUP 3 SHIELD	250
J21- 51	E 27	A 463Y	COMMONED RETURNS GROUND	204R
J21- 52	J10- 37	A 463R	KEY CODE 4	204S
J21- 53	E 27	A 461Y	COMMONED RETURNS GROUND	203R
J21- 54	E 27	A 460Y	COMMONED RETURNS GROUND	209R
J21- 55	J10- 46	A 469	SPARE	249
J21- 56	E 30	A 433Y	COMMONED RETURNS GROUND	237R
J21- 57	E 29	A 428Y	COMMONED RETURNS GROUND	231R
J21- 58	E 33	A 445Y	COMMONED RETURNS GROUND	226R
J21- 59	E 32	A 442Y	COMMONED RETURNS GROUND	222R
J21- 60	E 31	A 439Y	COMMONED RETURNS GROUND	218R
J21- 61	E 30	A 435Y	COMMONED RETURNS GROUND	214R
J21- 62	J10- 58	A 484	DISKY GROUND	251
J21- 63	J10- 55	A 486	SPARE	240
J21- 64	J10- 57	A 480	+13 V B	241
J21- 65	J10- 59	A 482	+28 VDC AGC	243
J21- 66	E 31	A 438Y	COMMONED RETURNS GROUND	217R
J21- 67	J10- 28	A 438R	OUT 0 4	217S
J21- 68	E 32	A 441Y	COMMONED RETURNS GROUND	221R
J21- 69	E 29	A 427Y	COMMONED RETURNS GROUND	230R
J21- 70	E 30	A 432Y	COMMONED RETURNS GROUND	236R
J21- 71	J10- 53	A 432R	KEY RELEASE	236S

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FROM	TO	COND NO	CIRCUIT FUNCTION	
J21- 72	J10- 75	A 451	SPARE	247
J21- 73	E 37	A 557	GROUP 2 SHIELD	245
J21- 74	E 26	A 464Y	COMMONED RETURNS GROUND	202R
J21- 82	J10- 36	A 461R	KEY CODE 3	203S
J21- 83	J10- 49	A 460R	KEY RESET NAV	209S
J21- 84	J10- 45	A 468	SPARE	248
J21- 85	J10- 51	A 433R	RUPT LOCK ALARM	237S
J21- 86	J10- 19	A 428R	TELEMETRY FAIL ALARM	231S
J21- 87	J10- 16	A 445R	OUT 0 13	226S
J21- 88	J10- 62	A 442R	OUT 0 9	222S
J21- 89	J10- 29	A 439R	OUT 0 5	218S
J21- 90	J10- 73	A 435R	OUT 0 1	214S
J21- 91	J10- 56	A 485	DISKY GROUND	239
J22- 2	J09- 50	A 303G	ATTITUDE DISABLE SIG TO NAA	
J22- 4	J16-B8	CC349W	COS AOG 1X S3	
J22- 7	J09- 41	A 303R	+28 VDC FROM NAA	
J22- 8	J09- 40	A 303Y	0 VDC FROM NAA	
J22- 12	J16-A8	CC348R	SIN AOG 1X S2	
J22- 13	J16-C8	CC349R	COS AOG 1X S1	
J22- 14	TB1-B16	CC327R	SIN AMG 1X	
J22- 15	TB1-B15	CC327W	SIN AMG 1X RET	
J22- 16	TB1-B13	CC328W	COS AMG 1X S3	
J22- 18	J09- 4	A 288Y	PITCH ATTIT IMPULSE CONTR OUTPUT UP	
J22- 26	J16-A9	CC348W	SIN AOG 1X S4	
J22- 32	TB1-B14	CC328R	COS AMG 1X S1	
J22- 33	TB1-A15	CC329W	SIN AIG 1X RET	
J22- 35	J09- 5	A 288R	PITCH ATTIT IMPULSE CONTR OUTPUT DOWN	
J22- 36	J09- 18	A 288G	PITCH ATTIT IMPULSE CONTR INPUT	
J22- 38	J17-L3	CC347	IMU TEMP LIGHT (MAIN PANEL)	
J22- 39	J17-M3	CC346	0 VDC SPACECRAFT	

(CONT.)

FROM	TO	COND NO	CIRCUIT FUNCTION
J22- 40	J08- 43	A 157	MASTER CAUTION LIGHT RET
J22- 41	TB1-C 4	CC326	+28 VDC SPACECRAFT
J22- 42	TB1-G 3	CC325W	ATTITUDE CONTROL RELAY CONTROL
J22- 48	SHLD CC 43	CC 43B	NAA SHIELD GROUND
J22- 49	J17-C4	CC 44R	YAW ERROR BODY AXIS HI
J22- 51	SHLD CC 48	CC 48B	NAA SHIELD GROUND
J22- 53	J17-C3	CC 45R	YAW ERROR BODY OFFSET AXIS HI
J22- 54	SHLD CC 47	CC 47B	NAA SHIELD GROUND
J22- 56	TB1-A16	CC329R	SIN AIG 1X
J22- 58	J09- 20	A 289Y	YAW ATTIT IMPULSE CONTR OUTPUT RIGHT
J22- 60	J09- 17	A 287R	ROLL ATTIT IMPULSE CONTR OUTPUT LEFT
J22- 62	P10- 8	A 407	MAIN PANEL GIMBAL LOCK LIGHT
J22- 63	J12-G3	CC 4	G+N ERROR LIGHT (MAIN PANEL)
J22- 64	J09- 14	A 295	SPACECRAFT LAMP TEST
J22- 65	J08- 53	A 160	MASTER WARNING LIGHT RET
J22- 67	TB1-G 5	CC325R	LOCK CDU RELAY CONTROL
J22- 68	TB1-H 5	CC325L	FINE ALIGN RELAY CONTROL
J22- 72	J20-F9	CC 59R	800 CPS 28 V 1 PCT HI IMU
J22- 73	J20-F8	CC 59W	800 CPS 28 V 1 PCT LO IMU
J22- 74	J17-A4	CC 43R	ROLL ERROR BODY AXIS HI
J22- 75	J17-B4	CC 43W	ROLL ERROR BODY AXIS LO
J22- 76	J17-D4	CC 44W	YAW ERROR BODY AXIS LO
J22- 77	SHLD CC 44	CC 44B	NAA SHIELD GROUND
J22- 78	J17-D1	CC 48R	PITCH ERROR BODY AND BODY OFFSET AXIS HI
J22- 79	J17-C1	CC 48W	PITCH ERROR BODY AND BODY OFFSET AXIS LO
J22- 80	SHLD CC 45	CC 45B	NAA SHIELD GROUND
J22- 81	J17-D3	CC 45W	YAW ERROR BODY OFFSET AXIS LO
J22- 82	J17-B3	CC 47W	ROLL ERROR BODY OFFSET AXIS LO
J22- 83	J17-A3	CC 47R	ROLL ERROR BODY OFFSET AXIS HI
J22- 84	TB1-A13	CC330R	COS AIG 1X
J22- 85	TB1-A14	CC330W	COS AIG 1X RET
J22- 87	J09- 6	A 289R	YAW ATTIT IMPULSE CONTR OUTPUT LEFT

(CONT.)

FROM	TO	COND NO	CIRCUIT FUNCTION	
J22- 88	J09- 7	A 289G	YAW ATTIT IMPULSE CONTR INPUT	
J22- 89	J09- 3	A 287Y	ROLL ATTIT IMPULSE CONTR OUTPUT RIGHT	
J22- 90	J09- 16	A 287G	ROLL ATTIT IMPULSE CONTR INPUT	
J23- 1	E 5	CC 12W	0 VDC IMU	140R
J23- 2	J13-N6	CC 12R	PIPA SWITCHING PULSE	140S
J23- 3	J14-D1	CC 13R	+ DX GYRO RATE	142R
J23- 4	J16-M4	CC 40R	COMPUTER 800 PPS IN PHASE SYNC	149S
J23- 5	E 6	CC 18W	0 VDC IMU	147S
J23- 6	E 5	CC 11W	0 VDC IMU	139R
J23- 7	J13-N5	CC 11R	PIPA INTERROGATE PULSE	139S
J23- 8	E 13	CC 36R	OG DAC MDA SIG LO	126R
J23- 9	E 13	CC 37W	OG DAC MDA SIG LO	127R
J23- 10	E 6	CC 13W	0 VDC IMU	142S
J23- 11	J14-D2	CC 14R	- DX GYRO RATE	143R
J23- 12	J16-L4	CC 39R	COMPUTER 800 PPS OUT OF PHASE SYNC	150S
J23- 13	J16-L3	CC 40W	COMPUTER 800 PPS SYNC RET	149R
J23- 14	J14-D6	CC 18R	- DZ GYRO RATE	147R
J23- 15	J14-D5	CC 17R	+ DZ GYRO RATE	146R
J23- 16	E 6	CC 17W	0 VDC IMU	146S
J23- 17	E 11	CC 35W	MG DAC MDA SIG LO	131R
J23- 18	J15-C7	CC 35R	MG CDU - DELTA THETA COMMAND	131S
J23- 19	J18-H3	CC 53W	SHAFT DELTA THETA COMMAND COMMON	115R
J23- 20	J18-K3	CC 53R	SHAFT - DELTA THETA COMMAND	115S
J23- 21	J15-B9	CC 36W	OG CDU + DELTA THETA COMMAND	126S
J23- 22	J15-C9	CC 37R	OG CDU - DELTA THETA COMMAND	127S
J23- 23	E 9	CC 32R	IG DAC MDA SIG LO	128R
J23- 24	E 6	CC 14W	0 VDC IMU	143S
J23- 25	J14-K4	CC 19R	GYRO RESET PULSE	148R
J23- 26	J12-M1	CC 5	AGC POWER SUPPLY FAIL SIG HI	157S
J23- 27	J16-L3	CC 39W	COMPUTER 800 PPS SYNC RET	150R

(CONT.)

FROM	TO	COND NO	CIRCUIT FUNCTION	
J23- 28	J17-R3	CC 51R	COMPUTER 12.8 KPPS SYNC	155S
J23- 29	J12-G2	CC 7R	COMPUTER 25.6 KPPS OUT OF PHASE SYNC	154S
J23- 30	J12-G1	CC 6R	COMPUTER 25.6 KPPS IN PHASE SYNC	153S
J23- 31	J11-L6	CC 1R	COMPUTER 3200 PPS OUT OF PHASE SYNC	152S
J23- 32	J14-D4	CC 16R	- DY GYRO RATE	145R
J23- 33	E 6	CC 16W	0 VDC IMU	145S
J23- 34	E 11	CC 34R	MG DAC MDA SIG LO	130R
J23- 35	J15-B7	CC 34W	MG CDU + DELTA THETA COMMAND	130S
J23- 36	J18-H3	CC 55W	SHAFT DELTA THETA COMMAND COMMON	114R
J23- 37	J18-G3	CC 55R	SHAFT + DELTA THETA COMMAND	114S
J23- 38	P11-A	A 503	+28 VDC AGC BUSS A	167
J23- 39	P12-A	A 531	+28 VDC AGC BUSS B	168
J23- 40	P12-A	A 532	+28 VDC AGC BUSS B	168
J23- 41	P12-J	A 551	0 VDC AGC	170
J23- 42	J15-B5	CC 32W	IG CDU + DELTA THETA COMMAND	128S
J23- 43	J15-C5	CC 33R	IG CDU - DELTA THETA COMMAND	129S
J23- 44	E 6	CC 19W	0 VDC IMU	148S
J23- 46	J12-K1	CC 3R	COMPUTER 102.4 KPPS SYNC	156S
J23- 47	J20-N5	CC 58	+28 VDC MDV	157R
J23- 48	TB1-D71	A 562	CONDITION LAMP TEST	157T
J23- 49	J17-S3	CC 51W	0 VDC IMU	155R
J23- 50	J12-F2	CC 7W	COMPUTER 25.6 KPPS SYNC RET	154R
J23- 51	J12-F2	CC 6W	COMPUTER 25.6 KPPS SYNC RET	153R
J23- 52	J11-M5	CC 1W	COMPUTER 3200 PPS SYNC RET	152R
J23- 53	J11-M5	CC 2W	COMPUTER 3200 PPS SYNC RET	151R
J23- 54	J11-M6	CC 2R	COMPUTER 3200 PPS IN PHASE SYNC	151S
J23- 55	J14-D3	CC 15R	+ DY GYRO RATE	144R
J23- 56	E 6	CC 15W	0 VDC IMU	144S
J23- 57	TB1-F52	CC331	THERMISTER LO	199R
J23- 58	P09-115	A 400	AGC THERMISTER HI	199S
J23- 59	J18-H5	CC 54W	TRUNNION DELTA THETA COMMAND COMMON	117R
J23- 60	J18-K5	CC 54R	TRUNNION - DELTA THETA COMMAND	117S

(CONT.)

FROM	TO	COND NO	CIRCUIT FUNCTION	
J23- 61	P11-A	A 504	+28 VDC AGC BUSS A	167
J23- 62	TB1-K78	A 558	+28 VDC AGC BUSS A	167
J23- 63	TB1-K78	A 559	+28 VDC AGC BUSS A	167
J23- 64	TB1-K77	A 560	+28 VDC AGC BUSS B	168
J23- 65	TB1-K77	A 561	+28 VDC AGC BUSS B	168
J23- 66	P12-J	A 552	0 VDC AGC	170
J23- 69	E 9	CC 33W	IG DAC MDA SIG LO	129R
J23- 73	J12-H1	CC 3W	COMPUTER 102.4 KPPS SYNC RET	156R
J23- 74	J20-F3	CC 57R	102.4 KPPS INPUT HI	056S
J23- 75	J20-D3	CC 57W	102.4 KPPS INPUT LO	056R
J23- 88	J18-H5	CC 52W	TRUNNION DELTA THETA COMMAND COMMON	116R
J23- 89	J18-G5	CC 52R	TRUNNION + DELTA THETA COMMAND	116S
J23- 90	P11-J	A 523	0 VDC AGC	169
J23- 91	P11-J	A 524	0 VDC AGC	169
J24- 1	TB1-G74	CC333	+13 VDC AGC	176
J24- 2	J15-M5	CC 20R	+ DELTA V X	132R
J24- 3	TB1-H73	CC334	0 VDC AGC	177
J24- 4	P01- 49	A 132Y	FINE ALIGN MODE INDICATION TO AGC	161
J24- 5	J16-A7	CC 41W	ZERO ENCODER MODE INDICATION TO AGC	158
J24- 6	TB1-G73	CC335	+3 VDC AGC	175
J24- 7	E 10	CC 29W	MG DAC MDA SIG LO	123R
J24- 8	J15-C6	CC 29R	MG ENCODER - DELTA THETA	123S
J24- 9	E 14	CC 20W	COMPUTER RET	132S
J24- 10	J15-M6	CC 21R	- DELTA V X	133R
J24- 11	TB1-H74	CC290	+28 VDC AGC	166
J24- 12	J06- 69	A 114Y	TRANSFER SWITCH INDICATION TO AGC	164
J24- 13	P01- 76	A 136Y	ATTIT CONT MODE INDICATION TO AGC	162
J24- 14	P01- 59	A 133Y	COARSE ALIGN MODE INDICATION TO AGC	159
J24- 15	TB1-A69	A 564R	OPTICS ZERO ENCODER INDICATION	104
J24- 16	J20-C3	CC 56W	STAR PRESENCE LO	183R

(CONT.)

FROM	TO	COND NO	CIRCUIT FUNCTION	
J24- 17	J20-C4	CC 56R	STAR PRESENCE HI	183S
J24- 18	E 10	CC 28R	MG DAC MDA SIG LO	122R
J24- 19	J15-B6	CC 28W	MG ENCODER + DELTA THETA	122S
J24- 20	E 12	CC 30R	OG DAC MDA SIG LO	118R
J24- 21	E 12	CC 31W	OG DAC MDA SIG LO	119R
J24- 22	E 8	CC 26R	IG DAC MDA SIG LO	120R
J24- 23	E 14	CC 21W	COMPUTER RET	133S
J24- 24	J15-L6	CC 22R	+ DELTA V Y	134R
J24- 25	J12-D6	CC 8R	IMU FAIL	141S
J24- 26	TB1-C56	CC332W	AGC COMMON (ISS)	165
J24- 29	P01- 39	A 131Y	ENTRY MODE INDICATION TO AGC	163
J24- 30	J15-A3	CC 38W	MANUAL CDU MODE INDICATION TO AGC	160
J24- 31	J09- 42	A 304Y	TRACKER ON INDICATION TO AGC	107
J24- 32	P10- 19	A 414Y	NOT MARK	103
J24- 33	J15-K4	CC 24R	- DELTA V Z	137R
J24- 34	E 16	CC 24W	COMPUTER RET	137S
J24- 35	J17-H4	CC 46W	SHAFT ENCODER DELTA THETA OUT COMMON	109R
J24- 36	J17-K4	CC 46R	SHAFT ENCODER - DELTA THETA OUTPUT	109S
J24- 37	J17-H6	CC 49W	TRUNNION ENCODER DELTA THETA OUT COM	111R
J24- 38	J17-K6	CC 49R	TRUNNION ENCODER - DELTA THETA OUT	111S
J24- 39	J15-B8	CC 30W	OG ENCODER + DELTA THETA	118S
J24- 40	J15-C8	CC 31R	OG ENCODER - DELTA THETA	119S
J24- 41	J15-B4	CC 26W	IG ENCODER + DELTA THETA	120S
J24- 42	E 8	CC 27W	IG DAC MDA SIG LO	121R
J24- 43	E 15	CC 22W	COMPUTER RET	134S
J24- 44	J15-K6	CC 23R	- DELTA V Y	135R
J24- 45	J12-D4	CC 10R	ACCEL FAIL	138S
J24- 46	J12-F6	CC 8W	IMU FAIL RET	141R
J24- 51	E 23	A 563	AGC SIGNAL 178 SHIELD RETURN	178
J24- 54	J09- 49	A 309Y	OPTICS MODE SW COMPUTER INDICATION	106
J24- 55	P10- 44	A 417Y	MARK	102
J24- 56	J15-K5	CC 25R	+ DELTA V Z	136R

(CONT.)

FROM	TO	COND NO	CIRCUIT FUNCTION	
J24- 57	E 16	CC 25W	COMPUTER RET	136S
J24- 58	J17-H4	CC 50W	SHAFT ENCODER DELTA THETA OUT COMMON	108R
J24- 59	J17-G4	CC 50R	SHAFT ENCODER + DELTA THETA OUTPUT	108S
J24- 60	J17-H6	CC 42W	TRUNNION ENCODER DELTA THETA OUT COM	110R
J24- 61	J17-G6	CC 42R	TRUNNION ENCODER + DELTA THETA OUT	110S
J24- 64	E 20	CC337	AGC SIGNAL 179 SHIELD RETURN	179
J24- 67	J15-C4	CC 27R	IG ENCODER - DELTA THETA	121S
J24- 69	E 15	CC 23W	COMPUTER RET	135S
J24- 70	J12-D5	CC 9R	CDU FAIL	124S
J24- 71	J12-F5	CC 9W	CDU FAIL RET	124R
J24- 72	J12-F4	CC 10W	ACCEL FAIL RET	138R
J24- 83	TB1-A68	A 566Y	SXT POWER ON INDICATION	105
J24- 84	TB1-A68	A 564Y	AGC COMMON (OSS)	101
J24- 87	E 18	CC336	AGC SIGNAL 179 SHIELD RETURN	179
P01- 1	J06- 1	A 96R	PITCH ATTITUDE ERROR METER +	
P01- 2	J06- 2	A 96Y	PITCH ATTITUDE ERROR METER -	
P01- 4	TB1-K 3	A 124G	COARSE ALIGN RELAY CONTROL	
P01- 5	TB1-H 5	A 124R	FINE ALIGN RELAY CONTROL	
P01- 6	J06- 6	A 97	ENTRY RELAY CONTROL RESET	
P01- 7	TB1-G 7	A 125	+28 VDC IMU	
P01- 9	J06- 9	A 98	MODE SWITCH INTERLOCK	
P01- 10	TB1-B 7	A 126Y	800 CPS 28 V 1 PCT LO IMU	
P01- 11	TB1-A 7	A 126R	800 CPS 28 V 1 PCT HI IMU	
P01- 12	TB1-K 5	A 124Y	ZERO ENCODER RELAY CONTROL	
P01- 13	TB1-B50	A 127R	FINE ALIGN MODE COMMAND FROM AGC	
P01- 14	J06- 14	A 100R	YAW ATTITUDE ERROR METER +	
P01- 15	J06- 15	A 100Y	YAW ATTITUDE ERROR METER -	
P01- 18	J06- 18	A 101	MODE RELAY COMMON TO D AND C ELECT	
P01- 22	J06- 22	A 102	ATTITUDE CONTROL MODE LIGHT	
P01- 23	J06- 23	A 103	FINE ALIGN RELAY CONTROL	

(CONT.)

FROM	TO	COND NO	CIRCUIT FUNCTION	
P01- 24	TB1-G 3	A 128Y	ATTITUDE CONTROL RELAY CONTROL	
P01- 25	J06- 25	A 105	ENTRY RELAY CONTROL	
P01- 26	TB1-A26	A 129	IMU DELAY LIGHT HI	
P01- 27	TB1-C48	A 130Y	CDU MANUAL MODE COMMAND FROM AGC	
P01- 28	J06- 28	A 106Y	ROLL ATTITUDE ERROR METER -	
P01- 29	J06- 29	A 106R	ROLL ATTITUDE ERROR METER +	
P01- 34	J06- 34	A 107	ZERO ENCODER RELAY CONTROL	
P01- 35	J06- 35	A 108	COARSE ALIGN RELAY CONTROL	
P01- 36	J06- 36	A 109	CDU MANUAL RELAY CONTROL	
P01- 37	J06- 37	A 110	MANUAL ALIGN	
P01- 38	TB1-C50	A 127Y	ZERO ENCODER MODE COMMAND FROM AGC	
P01- 39	J24- 29	A 131Y	ENTRY MODE INDICATION TO AGC	163
P01- 46	J06- 46	A 111	ATTITUDE CONTROL MODE INTERLOCK	
P01- 48	TB1-A50	A 127G	COARSE ALIGN MODE COMMAND FROM AGC	
P01- 49	J24- 4	A 132Y	FINE ALIGN MODE INDICATION TO AGC	161
P01- 56	J06- 56	A 112	MANUAL ALIGN ENABLE	
P01- 57	TB1-H 3	A 128G	ENTRY RELAY CONTROL	
P01- 58	TB1-C49	A 130R	ENTRY MODE COMMAND FROM AGC	
P01- 59	J24- 14	A 133Y	COARSE ALIGN MODE INDICATION TO AGC	159
P01- 68	TB1-C56	A 134Y	AGC COMMON (ISS)	
P01- 69	TB1-G 5	A 128R	LOCK CDU RELAY CONTROL	
P01- 70	TB1-K33	A 135R	IG CDU 1X ERROR SIG	
P01- 71	TB1-K34	A 135Y	IG CDU ERROR SIG RET	
P01- 76	J24- 13	A 136Y	ATTIT CONT MODE INDICATION TO AGC	162
P01- 78	TB1-D 3	A 137	0 VDC IMU	
P01- 79	J06- 79	A 116	ENTRY MODE LIGHT	
P01- 80	TB1-A54	A 138R	PANEL BRIGHTNESS CONTROL	
P01- 82	TB1-H33	A 139R	MG CDU 1X ERROR SIG	
P01- 83	TB1-H34	A 139Y	MG CDU ERROR SIG RET	
P01- 84	TB1-G 8	A 140	STRUCTURE GROUND	
P01- 88	TB1-D71	A 141	CONDITION LAMP TEST	
P01- 89	TB1-K72	A 142	+28 VDC MDV	

(CONT.)

FROM	TO	COND NO	CIRCUIT FUNCTION
P01- 90	TB1-C 2	A 143N	400 CPS 6 V HI
P01- 91	TB1-C 3	A 144	MODE LAMP TEST PWR
P01- 92	J06- 92	A 118	COARSE ALIGN MODE LIGHT
P01- 93	J06- 93	A 119	MODE RELAY COMMON
P01- 94	J06- 94	A 120	FINE ALIGN MODE LIGHT
P01- 95	TB1-A55	A 138Y	PANEL BRIGHTNESS CONTROL
P01- 96	TB1-G33	A 145R	OG CDU 1X ERROR SIG
P01- 97	TB1-G34	A 145Y	OG CDU ERROR SIG RET
P01-103	TB1-A 2	A 143R	400 CPS VARIABLE ILLUMINATION POWER
P01-104	J06-104	A 121	ZERO ENCODER MODE LIGHT
P01-105	J06-105	A 122	CDU MANUAL MODE LIGHT
P01-106	TB1-C 1	A 143G	400 CPS 6 V HI
P01-108	TB1-A 4	A 143Y	400 CPS VARIABLE ILLUMINATION POWER
P02-A	TB1-A 5	A 178R	800 CPS 28 V 1 PCT HI IMU
P02-A*	TB1-A13	A 179R	COS AIG 1X S3
P02-B	TB1-B 5	A 178Y	IMU RSVR EXC 800 CPS 28 V 1 PCT LO IMU
P02-B*	TB1-A14	A 179Y	COS AIG 1X RET S1
P02-C	TB1-F15	A 180R	COS AOG 16X S3
P02-D	TB1-F14	A 180Y	COS AOG 16X S1
P02-E	TB1-G14	A 181R	SIN AOG 16X S2
P02-F	TB1-G15	A 181Y	SIN AOG 16X S4
P02-F*	TB1-A15	A 182R	SIN AIG 1X RET S2
P02-G	TB1-H10	A 183R	COS AMG 16X S3
P02-G*	TB1-A16	A 182Y	SIN AIG 1X S4
P02-H	TB1-H 9	A 183Y	COS AMG 16X S1
P02-J	TB1-K 9	A 184R	SIN AMG 16X S2
P02-K	TB1-K10	A 184Y	SIN AMG 16X S4
P02-L	TB1-B13	A 185R	COS AMG 1X S3
P02-M	TB1-B14	A 185Y	COS AMG 1X S1
P02-N	TB1-B15	A 186Y	SIN AMG 1X RET S2

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FROM	TO	COND NO	CIRCUIT FUNCTION
P02-P	TB1-B16	A 186R	SIN AMG 1X S4
P02-R	TB1-K 7	A 187R	3200 CPS 2 V HI
P02-S	TB1-H 7	A 187Y	3200 CPS 2 V LO
P02-T	TB1-K 8	A 188R	3200 CPS 2 V FEEDBACK HI
P02-U	TB1-H 8	A 188Y	3200 CPS 2 V FEEDBACK LO
P02-W	TB1-H15	A 189R	COS AIG 16X S3
P02-X	TB1-H14	A 189Y	COS AIG 16X S1
P02-Y	TB1-K14	A 190R	SIN AIG 16X S2
P02-Z	TB1-K15	A 190Y	SIN AIG 16X S4
P03-A	TB1-G28	A 191Y	X GYRO ERROR SIG
P03-A*	TB1-D19	A 192Y	MG TORQUE MOTOR RET
P03-B	TB1-F28	A 193Y	Z GYRO ERROR SIG
P03-B*	TB1-D19	A 194Y	MG TORQUE MOTOR RET
P03-C	TB1-A28	A 195R	IMU OG ERROR SIG
P03-C*	TB1-D18	A 194R	MG TORQUE MOTOR HI
P03-D	TB1-C14	A 196R	COS AOG 1X S3
P03-D*	TB1-F18	A 197R	IG TORQUE MOTOR HI
P03-E	TB1-C15	A 196Y	COS AOG 1X S1
P03-E*	TB1-F19	A 197Y	IG TORQUE MOTOR RET
P03-F	TB1-D15	A 198R	SIN AOG 1X S4
P03-F*	TB1-F19	A 199Y	IG TORQUE MOTOR RET
P03-G	TB1-D14	A 198Y	SIN AOG 1X S2
P03-G*	TB1-F18	A 199R	IG TORQUE MOTOR HI
P03-H	TB1-K29	A 200Y	IG CDU ATTITUDE STEERING ERROR
P03-H*	TB1-G 7	A 201	+28 VDC IMU
P03-J	TB1-K28	A 200R	IG CDU ERROR SIG RET
P03-J*	TB1-A56	A 202	GIMBAL LOCK SIGNAL
P03-K	TB1-H28	A 203R	MG CDU ERROR SIG RET
P03-L	TB1-H29	A 203Y	MG CDU ATTITUDE STEERING ERROR
P03-M	TB1-K13	A 204Y	YAW ERROR BODY OFFSET AXIS LO

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FROM	TO	COND NO	CIRCUIT FUNCTION
P03-N	TB1-H13	A 204R	PITCH YAW RSVR S3
P03-P	TB1-G13	A 205Y	PITCH ERROR BODY AND BODY OFFSET AXIS LO
P03-R	TB1-F13	A 205R	PITCH-YAW RSVR S4
P03-U	TB1-C28	A 195G	IMU IG AND Y GYRO ERROR SIG
P03-V	TB1-D28	A 195Y	IMU GIMBAL AND GYRO ERROR SIG LO
P03-W	TB1-B28	A 195N	IMU MG ERROR SIG
P03-X	TB1-C19	A 206Y	OG TORQUE MOTOR RET
P03-Y	TB1-C18	A 206R	OG TORQUE MOTOR HI
P03-Z	TB1-D18	A 192R	MG TORQUE MOTOR HI
P04- 1	P05- 59	A 209R	SXT TRUNNION 64X RSVR P4
P04- 2	P05- 58	A 209Y	SXT TRUNNION 64X RSVR P2
P04- 3	TB1-D 6	A 208R	800 CPS 28 V 1 PCT HI OPTICS
P04- 4	TB1-F 6	A 208Y	800 CPS 28 V 1 PCT LO OPTICS
P04- 5	P05- 30	A 207R	SXT SHAFT 16X RSVR P4
P04- 6	P05- 27	A 207Y	SXT SHAFT 16X RSVR P2
P05- 1	TB1-G11	A 210	STRUCTURE GROUND
P05- 2	TB1-C46	A 211Y	SXT SHAFT 1/2X RSVR S4
P05- 3	TB1-C45	A 211R	SXT SHAFT 1/2X RSVR S2
P05- 5	TB1-G51	A 212R	SXT TRUNNION MOTOR PHASE 2
P05- 6	TB1-D45	A 213R	SXT SHAFT 1/2X RSVR S1
P05- 7	TB1-D46	A 213Y	SXT SHAFT 1/2X RSVR S3
P05- 8	TB1-G49	A 214R	SXT SHAFT MOTOR PHASE 2
P05- 9	TB1-B67	A 215	0 VDC OPTICS
P05- 10	TB1-A65	A 216Y	TRACKER Y REFERENCE
P05- 11	TB1-A66	A 216R	TRACKER Y REFERENCE
P05- 12	TB1-D 6	A 217R	800 CPS 28 V 1 PCT HI OPTICS
P05- 13	TB1-F 6	A 217Y	800 CPS 28 V 1 PCT LO OPTICS
P05- 14	TB1-F 6	A 217G	800 CPS 28 V 1 PCT LO OPTICS

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FROM	TO	COND NO	CIRCUIT FUNCTION
P05- 16	TB1-G50	A 212G	0 VDC OPTICS
P05- 17	TB1-B66	A 218R	TRACKER X REFERENCE
P05- 18	TB1-B65	A 218Y	TRACKER X REFERENCE
P05- 19	TB1-G50	A 214G	0 VDC OPTICS
P05- 23	TB1-H37	A 219R	SXT SHAFT TACH HI
P05- 24	TB1-H38	A 219Y	SXT SHAFT TACH LO
P05- 27	P04- 6	A 207Y	SXT SHAFT 16X RSVR P2
P05- 30	P04- 5	A 207R	SXT SHAFT 16X RSVR P4
P05- 32	TB1-D 7	A 220R	800 CPS 28 V 1 PCT HI OPTICS
P05- 33	TB1-G52	A 212Y	SXT TRUNNION MOTOR PHASE 1
P05- 34	TB1-D37	A 221R	SXT TRUNNION TACH HI
P05- 35	TB1-D38	A 221Y	SXT TRUNNION TACH LO
P05- 36	TB1-G48	A 214Y	SXT SHAFT MOTOR PHASE 1
P05- 37	TB1-C67	A 222	0 VDC OPTICS
P05- 38	TB1-D43	A 223R	SXT TRUNNION 1X RSVR S3
P05- 39	TB1-D44	A 223Y	SXT TRUNNION 1X RSVR S1
P05- 40	TB1-C43	A 224Y	SXT TRUNNION 1X RSVR S2
P05- 41	TB1-C44	A 224R	SXT TRUNNION 1X RSVR S4
P05- 43	TB1-A 3	A 225R	400 CPS VARIABLE ILLUMINATION POWER
P05- 44	TB1-B 3	A 225Y	400 CPS 6 V LO
P05- 51	TB1-G45	A 226Y	SXT SHAFT 1X RSVR S4
P05- 52	TB1-G46	A 226R	SXT SHAFT 1X RSVR S2
P05- 53	TB1-F46	A 227R	SXT SHAFT 1X RSVR S1
P05- 54	TB1-F45	A 227Y	SXT SHAFT 1X RSVR S3
P05- 55	TB1-F 7	A 220Y	800 CPS 28 V 1 PCT LO OPTICS
P05- 58	P04- 2	A 209Y	SXT TRUNNION 64X RSVR P2
P05- 59	P04- 1	A 209R	SXT TRUNNION 64X RSVR P4
P05- 64	TB1-D66	A 228R	TRACKER PREAMP OUTPUT HI
P05- 65	TB1-D65	A 228Y	TRACKER PREAMP OUTPUT LO
P05- 68	TB1-B71	A 229	+28 VDC OPTICS TRACKER POWER
P05- 69	TB1-D78	A 230	0 VDC OPTICS
P05- 70	TB1-F 7	A 231Y	800 CPS 28 V 1 PCT LO OPTICS

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FROM	TO	COND NO	CIRCUIT FUNCTION
P05- 71	TB1-D 7	A 231R	800 CPS 28 V 1 PCT HI OPTICS
P05- 72	TB1-C66	A 232R	TRACKER AUTOMATIC GAIN CONTROL HI
P05- 73	TB1-C65	A 232Y	TRACKER AUTOMATIC GAIN CONTROL LO
P05- 76	TB1-D 8	A 233R	800 CPS 28 V 5 PCT L-90 DEG HI OPTICS
P05- 77	TB1-F 8	A 233Y	800 CPS 28 V 5 PCT L-90 DEG LO OPTICS
P05- 78	TB1-B46	A 234Y	SXT SHAFT 16X RSVR S4
P05- 79	TB1-B45	A 234R	SXT SHAFT 16X RSVR S2
P05- 80	TB1-K66	A 235R	PHOTOMETER SIGNAL HI
P05- 81	TB1-K65	A 235Y	PHOTOMETER SIGNAL LO
P05- 82	TB1-A45	A 236Y	SXT SHAFT 16X RSVR S1
P05- 83	TB1-A46	A 236R	SXT SHAFT 16X RSVR S3
P05- 84	TB1-D 7	A 237R	800 CPS 28 V 1 PCT HI OPTICS
P05- 85	TB1-F 7	A 237Y	800 CPS 28 V 1 PCT LO OPTICS
P05- 86	TB1-A44	A 238Y	SXT TRUNNION 64X RSVR S1
P05- 87	TB1-A43	A 238R	SXT TRUNNION 64X RSVR S3
P05- 88	TB1-H66	A 239R	STAR PRESENCE INPUT HI
P05- 89	TB1-H65	A 239Y	STAR PRESENCE INPUT LO
P05- 90	TB1-B44	A 240Y	SXT TRUNNION 64X RSVR S4
P05- 91	TB1-B43	A 240R	SXT TRUNNION 64X RSVR S2
P06-A	TB1-C74	A 241G	800 CPS 28 V 5 PCT IMU WHEELS PHASE A
P06-A*	TB1-K64	A 242Y	IRIG TEMP IND SENSOR RET
P06-B	TB1-C73	A 241Y	800 CPS 28 V 5 PCT IMU WHEELS LO
P06-B*	TB1-K74	A 243R	PRESSURE SENSOR +28 VDC HI
P06-C	TB1-C72	A 241R	800 CPS 28 V 5 PCT IMU WHEELS PHASE B
P06-C*	TB1-K73	A 243Y	PRESSURE SENSOR +28 VDC LO
P06-D	TB1-G71	A 244	+28 VDC IMU
P06-D*	TB1-D68	A 245R	IMU PRESSURE MONITOR HI
P06-E	TB1-H26	A 246	0 VDC IMU
P06-E*	TB1-D69	A 245Y	IMU PRESSURE MONITOR LO
P06-F	TB1-C54	A 247	-28 VDC

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FROM	TO	COND NO	CIRCUIT FUNCTION
P06-F*	TB1-C77	A 248R	800 CPS 28 V 5 PCT HI TO BLOWERS
P06-G	TB1-G70	A 249	STRUCTURE GROUND
P06-G*	TB1-C76	A 248Y	800 CPS 28 V 5 PCT L-90 DEG LO IMU
P06-H	TB1-C18	A 250R	OG TORQUE MOTOR HI
P06-J	TB1-C19	A 250Y	OG TORQUE MOTOR RET
P06-K	TB1-H61	A 251	IMU TEMP SENSOR COM
P06-L	TB1-H64	A 252Y	IRIG TEMP CONT SENSOR RET
P06-M	TB1-H63	A 252R	IRIG TEMP CONT SENSOR HI
P06-N	TB1-H62	A 253R	ACCEL INDICATING SENSOR HI
P06-P	TB1-G61	A 253Y	ACCEL TEMP IND SENSOR RET
P06-R	TB1-C61	A 254Y	EMERGENCY HTR LO-OPER AND STBY
P06-V	TB1-D60	A 255R	IMU CONTROL HTR HI
P06-W	TB1-D61	A 255Y	IMU CONTROL HTR LO
P06-X	TB1-C60	A 254R	IMU EMERGENCY HTR HI
P06-Y	TB1-D62	A 256	EMERG HTR CONT MODULE LO
P06-Z	TB1-K63	A 242R	IRIG TEMP IND SENSOR HI
P07-A	TB1-C23	A 257L	Z GYRO TORQUE +
P07-A*	TB1-D10	A 258Y	Y PIP ERROR LO
P07-B	TB1-C22	A 257W	Z GYRO TORQUE RET
P07-B*	TB1-C11	A 259R	Z PIP ERROR HI
P07-C	TB1-C21	A 257R	Z GYRO TORQUE -
P07-C*	TB1-C10	A 259Y	Z PIP ERROR LO
P07-D	TB1-F23	A 260L	X GYRO TORQUE +
P07-E	TB1-F22	A 260W	X GYRO TORQUE RET
P07-F	TB1-F21	A 260R	X GYRO TORQUE -
P07-F*	TB1-A10	A 261G	OG ADA
P07-G	TB1-D23	A 262L	Y GYRO TORQUE +
P07-G*	TB1-A11	A 261N	MG ADA
P07-H	TB1-D22	A 262W	Y GYRO TORQUE RET
P07-H*	TB1-B11	A 261R	IG ADA

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P07-J	TB1-D21	A 262R	Y GYRO TORQUE -
P07-J*	TB1-B10	A 261Y	0 VDC IMU
P07-K	TB1-G23	A 263L	Z PIP TORQUE +
P07-L	TB1-G22	A 263W	Z PIP TORQUE RET
P07-M	TB1-G21	A 263R	Z PIP TORQUE -
P07-N	TB1-H23	A 264L	Y PIP TORQUE +
P07-P	TB1-H22	A 264W	Y PIP TORQUE RET
P07-R	TB1-H21	A 264R	Y PIP TORQUE -
P07-U	TB1-K23	A 265L	X PIP TORQUE +
P07-V	TB1-K22	A 265W	X PIP TORQUE RET
P07-W	TB1-K21	A 265R	X PIP TORQUE -
P07-X	TB1-F11	A 266R	X PIP ERROR HI
P07-Y	TB1-F10	A 266Y	X PIP ERROR LO
P07-Z	TB1-D11	A 258R	Y PIP ERROR HI
P08- 1	TB1-K50	A 267G	0 VDC OPTICS
P08- 2	TB1-K51	A 267R	SCT TRUNNION MOTOR PHASE 2
P08- 3	TB1-K52	A 267Y	SCT TRUNNION MOTOR PHASE 1
P08- 5	TB1-H51	A 268R	SCT SHAFT MOTOR PHASE 2
P08- 6	TB1-H52	A 268Y	SCT SHAFT MOTOR PHASE 1
P08- 7	TB1-H50	A 268G	0 VDC OPTICS
P08- 9	TB1-F44	A 269R	SCT TRUNNION 1X RSVR P2
P08- 10	TB1-F43	A 269Y	SCT TRUNNION 1X RSVR P4
P08- 12	TB1-G43	A 270R	SCT TRUNNION 1X RSVR P3
P08- 13	TB1-G44	A 270Y	SCT TRUNNION 1X RSVR P1
P08- 18	TB1-F40	A 271Y	SCT TRUNNION 1X RSVR S2
P08- 19	TB1-F41	A 271R	SCT TRUNNION 1X RSVR S4
P08- 21	TB1-A74	A 272R	800 CPS 28 V 5 PCT L-90 DEG HI OPTICS
P08- 22	TB1-B74	A 272Y	800 CPS 28 V 5 PCT L-90 DEG LO OPTICS
P08- 24	TB1-A74	A 273R	800 CPS 28 V 5 PCT L-90 DEG HI OPTICS
P08- 25	TB1-B74	A 273Y	800 CPS 28 V 5 PCT L-90 DEG LO OPTICS

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P08- 27	TB1-A73	A 274R	800 CPS 28 V 1 PCT HI OPTICS
P08- 28	TB1-B73	A 274Y	800 CPS 28 V 1 PCT LO OPTICS
P08- 30	TB1-A73	A 275R	800 CPS 28 V 1 PCT HI OPTICS
P08- 31	TB1-B73	A 275Y	800 CPS 28 V 1 PCT LO OPTICS
P08- 33	TB1-F37	A 276R	SCT TRUNNION TACH HI
P08- 34	TB1-F38	A 276Y	SCT TRUNNION TACH LO
P08- 35	SHLD A 276	A 276A	0 VDC OPTICS
P08- 37	SHLD A 278	A 278A	0 VDC OPTICS
P08- 38	TB1-K37	A 278R	SCT SHAFT TACH HI
P08- 39	TB1-K38	A 278Y	SCT SHAFT TACH LO
P08- 41	TB1-G46	A 279R	SCT SHAFT 1X RSVR P2
P08- 42	TB1-G45	A 279Y	SCT SHAFT 1X RSVR P4
P08- 44	TB1-F46	A 280R	SCT SHAFT 1X RSVR P3
P08- 45	TB1-F45	A 280Y	SCT SHAFT 1X RSVR P1
P08- 50	TB1-K41	A 281R	SCT SHAFT 1X RSVR S2
P08- 51	TB1-K40	A 281Y	SCT SHAFT 1X RSVR S4
P08- 53	TB1-A 4	A 282R	400 CPS VARIABLE ILLUMINATION POWER
P08- 54	TB1-B 4	A 282Y	400 CPS 6 V LO
P08- 56	TB1-A 4	A 283R	400 CPS VARIABLE ILLUMINATION POWER
P08- 57	TB1-B 4	A 283Y	400 CPS 6 V LO
P08- 59	TB1-G70	A 284	STRUCTURE GROUND
P09- 1	TB1-A16	A 332Y	SIN AIG 1X
P09- 2	TB1-A13	A 333Y	COS AIG 1X
P09- 3	TB1-A14	A 333R	COS AIG 1X RET
P09- 4	TB1-D15	A 334Y	SIN AOG 1X S4
P09- 5	TB1-D77	A 335	0 VDC OPTICS
P09- 6	TB1-H71	A 336	+28 VDC OPTICS
P09- 7	TB1-A63	A 337R	+120 VDC PIP
P09- 9	TB1-G31	A 338R	OG CDU 16X ERROR SIG
P09- 10	TB1-H70	A 339	STRUCTURE GROUND

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P09- 11	TB1-A 7	A 340R	800 CPS 28 V 1 PCT HI IMU
P09- 12	TB1-B 7	A 340Y	800 CPS 28 V 1 PCT LO IMU
P09- 13	TB1-C75	A 341R	800 CPS 28 V 5 PCT L-90 DEG HI IMU
P09- 14	TB1-C76	A 341Y	800 CPS 28 V 5 PCT L-90 DEG LO IMU
P09- 19	TB1-G57	A 342	CDU TRUNNION 16X RSVR ERROR SIG BUFFERED
P09- 20	TB1-H58	A 343	SHAFT CDU 16X ERROR SIG BUFFERED
P09- 21	TB1-H55	A 344	SXT TRUNNION TACH FEEDBACK BUFFERED
P09- 22	TB1-H57	A 345	TRUNNION CDU TACH FEEDBACK BUFFERED
P09- 23	TB1-A15	A 332R	SIN AIG 1X RET
P09- 24	TB1-B16	A 346Y	SIN AMG 1X
P09- 25	TB1-B13	A 347R	COS AMG 1X S3
P09- 26	TB1-D14	A 334R	SIN AOG 1X S2
P09- 27	TB1-C15	A 348Y	COS AOG 1X S1
P09- 28	TB1-C63	A 337G	+32 VDC PIP
P09- 29	TB1-B63	A 337Y	+32, +120 VDC RET PIP
P09- 31	TB1-G30	A 338Y	OG CDU ERROR SIG RET
P09- 32	TB1-C74	A 349G	800 CPS 28 V 5 PCT IMU WHEELS PHASE A
P09- 33	TB1-C72	A 349R	800 CPS 28 V 5 PCT IMU WHEELS PHASE B
P09- 37	TB1-K57	A 350	SCT TRUNNION 1X ERROR SIG BUFFERED
P09- 38	TB1-H54	A 351	SCT SHAFT 1X ERROR SIG BUFFERED
P09- 39	TB1-G58	A 352	SHAFT CDU TACH FEEDBACK SIG BUFFERED
P09- 40	TB1-F58	A 353	SCT TRUNNION TACH FEEDBACK BUFFERED
P09- 41	TB1-K34	A 354Y	IG CDU ERROR SIG RET
P09- 42	TB1-B15	A 346R	SIN AMG 1X RET
P09- 43	TB1-H34	A 355Y	MG CDU ERROR SIG RET
P09- 44	TB1-B14	A 347Y	COS AMG 1X S1
P09- 45	TB1-C14	A 348R	COS AOG 1X S3
P09- 46	TB1-G73	A 356	+3 VDC AGC
P09- 47	TB1-H72	A 357	+28 VDC STBY
P09- 48	TB1-B62	A 358	0 VDC IMU
P09- 49	TB1-G71	A 359	+28 VDC IMU
P09- 50	TB1-C73	A 349Y	800 CPS 28 V 5 PCT IMU WHEELS LO

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(CONT.)

FROM	TO	COND NO	CIRCUIT FUNCTION
P09- 54	TB1-G55	A 360	TRACKER X DRIVE BUFFERED HI
P09- 55	TB1-G54	A 361	TRACKER Y DRIVE BUFFERED HI
P09- 56	TB1-F57	A 362	0 VDC OPTICS
P09- 57	TB1-K55	A 363	SXT SHAFT TACH FEEDBACK BUFFERED
P09- 58	TB1-K54	A 364	SCT SHAFT TACH FEEDBACK BUFFERED
P09- 59	TB1-K33	A 354R	IG CDU 1X ERROR SIG
P09- 60	TB1-H33	A 355R	MG CDU 1X ERROR SIG
P09- 61	TB1-G34	A 365Y	OG CDU ERROR SIG RET
P09- 62	TB1-G74	A 366	+13 VDC AGC
P09- 63	TB1-H73	A 367	0 VDC AGC
P09- 64	TB1-H74	A 368	+28 VDC AGC
P09- 65	TB1-F70	A 369R	+2.5 VDC CONDITIONING LO
P09- 66	TB1-C54	A 370	-28 VDC
P09- 67	TB1-D26	A 371	AGC POWER SUPPLY FAIL SIG HI
P09- 68	TB1-B62	A 372	0 VDC IMU
P09- 69	TB1-A26	A 373	IMU DELAY LIGHT HI
P09- 70	TB1-K 8	A 374R	3200 CPS 2 V FEEDBACK HI
P09- 71	TB1-G56	A 375	TRACKER PREAMP OUTPUT BUFFERED HI
P09- 72	TB1-K58	A 376	PHOTOMETER PREAMP OUTPUT BUFFERED HI
P09- 73	TB1-H56	A 377	SXT TRUNNION MDA INPUT BUFFERED
P09- 74	TB1-K56	A 378	SXT SHAFT MDA INPUT BUFFERED
P09- 75	TB1-F28	A 379Y	Z GYRO ERROR SIG
P09- 76	TB1-G28	A 380Y	X GYRO ERROR SIG
P09- 77	TB1-G33	A 365R	OG CDU 1X ERROR SIG
P09- 78	TB1-D69	A 381Y	IMU PRESSURE MONITOR LO
P09- 79	TB1-D68	A 381R	IMU PRESSURE MONITOR HI
P09- 80	TB1-D52	A 382	TRAY 4 THERMISTER HI
P09- 81	TB1-F71	A 369Y	+2.5 VDC CONDITIONING HI
P09- 82	TB1-G72	A 383R	+20 VDC CONDITIONING
P09- 83	TB1-F72	A 383Y	0 VDC CONDITIONING
P09- 84	TB1-C26	A 384	G+N ERROR LIGHT HI
P09- 85	TB1-A56	A 385	GIMBAL LOCK SIGNAL

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(CONT.)

FROM	TO	COND NO	CIRCUIT FUNCTION	
P09- 86	TB1-B26	A 386	IMU TEMP CONT FAIL LIGHT HI	
P09- 87	TB1-H 2	A 387Y	25.6 KC LO IMU	
P09- 88	TB1-H 8	A 374Y	3200 CPS 2 V FEEDBACK LO	
P09- 89	TB1-C58	A 388G	IG CDU FAILURE INDICATION	
P09- 90	TB1-C57	A 388N	MG CDU FAILURE INDICATION	
P09- 91	TB1-F19	A 389Y	IG TORQUE MOTOR RET	
P09- 92	TB1-F18	A 389R	IG TORQUE MOTOR HI	
P09- 93	TB1-D28	A 390N	IMU GIMBAL AND GYRO ERROR SIG LO	
P09- 94	TB1-C28	A 390G	IMU IG AND Y GYRO ERROR SIG	
P09- 95	TB1-B40	A 391G	X PIP ERROR MONITOR	
P09- 96	TB1-A40	A 391R	Y PIP ERROR MONITOR	
P09- 97	TB1-F52	A 392	THERMISTER LO	
P09- 98	TB1-D51	A 393	TRAY 3 THERMISTER HI	
P09-102	TB1-B74	A 394Y	800 CPS 28 V 5 PCT L-90 DEG LO OPTICS	
P09-103	TB1-A74	A 394R	800 CPS 28 V 5 PCT L-90 DEG HI OPTICS	
P09-104	TB1-K 2	A 395Y	25.6 KC LO OPTICS	
P09-105	TB1-H 1	A 387R	25.6 KC HI IMU	
P09-106	TB1-F64	A 396	ACCEL TEMP (TELEMETRY)	
P09-107	TB1-A64	A 397	BLOWER CURRENT SENSOR (TELEMETRY)	
P09-108	TB1-D58	A 388Y	0 VDC IMU	
P09-109	TB1-C19	A 398Y	OG TORQUE MOTOR RET	
P09-110	TB1-D19	A 399Y	MG TORQUE MOTOR RET	
P09-111	TB1-A28	A 390Y	IMU OG ERROR SIG	
P09-112	TB1-B28	A 390R	IMU MG ERROR SIG	
P09-113	TB1-A41	A 391Y	Z PIP ERROR MONITOR	
P09-114	TB1-B41	A 391N	0 VDC IMU	
P09-115	J23- 58	A 400	AGC THERMISTER HI	1995
P09-116	TB1-F51	A 401	TRAY 2 THERMISTER HI	
P09-124	TB1-B72	A 402Y	800 CPS 28 V 1 PCT LO OPTICS	
P09-125	TB1-A72	A 402R	800 CPS 28 V 1 PCT HI OPTICS	
P09-126	TB1-K 1	A 395R	25.6 KC HI OPTICS	
P09-127	TB1-D64	A 403	IRIG TEMP (TELEMETRY)	

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FROM	TO	COND NO	CIRCUIT FUNCTION	
P09-128	TB1-C64	A 404	TEMPERATURE CONTROL SIG LO	
P09-129	TB1-B64	A 405	HTR CURRENT (TELEMETRY)	
P09-130	TB1-D57	A 388R	OG CDU FAILURE INDICATION	
P09-131	TB1-C18	A 398R	OG TORQUE MOTOR HI	
P09-132	TB1-D18	A 399R	MG TORQUE MOTOR HI	
P10- 1	TB1-H70	A 406	STRUCTURE GROUND	
P10- 8	J22- 62	A 407	MAIN PANEL GIMBAL LOCK LIGHT	
P10- 9	TB1-D70	A 408	0 VDC SPACECRAFT	
P10- 10	TB1-D72	A 409	CONDITION LAMP TEST	
P10- 12	TB1-A56	A 410	GIMBAL LOCK SIGNAL	
P10- 13	TB1-C62	A 411	0 VDC IMU	
P10- 14	TB1-H71	A 412	+28 VDC OPTICS	
P10- 15	TB1-B61	A 413Y	AUTOMATIC MARK COMMAND	
P10- 16	J09- 31	A 299	MANUAL MARK COMMAND	
P10- 19	J24- 32	A 414Y	NOT MARK	103
P10- 24	TB1-A23	A 415	GIMBAL LOCK LIGHT HI	
P10- 32	J09- 30	A 298Y	ACCEPT MARK	
P10- 33	J09- 33	A 301Y	MARK REJECT	
P10- 38	J09- 77	A 314Y	400 CPS 1.5 V ZERO PHASE	
P10- 39	J09- 65	A 314R	400 CPS 1.5 V PI PHASE	
P10- 43	TB1-A69	A 416Y	OPTICS ZERO ENCODER INDICATION	
P10- 44	J24- 55	A 417Y	MARK	102
P10- 48	J09- 95	A 314G	400 CPS 26 V HI	
P10- 49	TB1-A75	A 418R	400 CPS 26 V LO	
P10- 68	TB1-C78	A 419Y	400 CPS 115 V LO	
P10- 69	TB1-B78	A 419R	400 CPS 115 V HI	
P10- 92	J09- 52	A 311Y	400 CPS 6 V LO	
P10- 93	TB1-B 2	A 420R	400 CPS 6 V LO	
P10- 94	TB1-B 4	A 420Y	400 CPS 6 V LO	
P10- 95	TB1-B75	A 418Y	400 CPS 6 V LO	

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(CONT.)

FROM	TO	COND NO	CIRCUIT FUNCTION	
P10-104	TB1-K71	A 421	+28 VDC MDV	
P10-105	J09- 61	A 311G	400 CPS 6 V HI	
P10-106	J09- 53	A 311R	400 CPS 6 V HI	
P10-107	TB1-C 1	A 420G	400 CPS 6 V HI	
P10-108	TB1-C 2	A 420N	400 CPS 6 V HI	
P11-A	TB1-K78	A 502	+28 VDC AGC BUSS A	
P11-A	J23- 38	A 503	+28 VDC AGC BUSS A	167
P11-A	J23- 61	A 504	+28 VDC AGC BUSS A	167
P11-B	TB1-K76	A 505	+28 VDC IMU BUSS A	
P11-B	TB1-K76	A 506	+28 VDC IMU BUSS A	
P11-B	TB1-K76	A 507	+28 VDC IMU BUSS A	
P11-C	TB1-H76	A 508	+28 VDC IMU BUSS A	
P11-C	TB1-H76	A 509	+28 VDC IMU BUSS A	
P11-C	TB1-H76	A 510	+28 VDC IMU BUSS A	
P11-D	TB1-F75	A 511	0 VDC IMU	
P11-D	TB1-B68	A 512	0 VDC IMU	
P11-E	TB1-C69	A 513	0 VDC IMU	
P11-E	TB1-D74	A 514	0 VDC IMU	
P11-F	TB1-F73	A 515	0 VDC IMU	
P11-F	TB1-B70	A 516	0 VDC IMU	
P11-G	TB1-F78	A 517	0 VDC OPTICS	
P11-G	TB1-K53	A 518	0 VDC OPTICS	
P11-G	TB1-K50	A 519	0 VDC OPTICS	
P11-H	TB1-G78	A 520	+28 VDC OPTICS BUSS A	
P11-H	TB1-G78	A 521	+28 VDC OPTICS BUSS A	
P11-H	TB1-H78	A 522	+28 VDC OPTICS BUSS A	
P11-J	J23- 90	A 523	0 VDC AGC	169
P11-J	J23- 91	A 524	0 VDC AGC	169
P11-J	P12-J	A 525	0 VDC AGC	
P11-K	TB1-C78	A 526Y	400 CPS 115 V LO	

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FROM	TO	COND NO	CIRCUIT FUNCTION	
P11-L	TB1-G70	A 527	STRUCTURE GROUND	
P11-M	TB1-G76	A 528	+28 VDC STBY BUSS A	
P11-M	TB1-G76	A 529	+28 VDC STBY BUSS A	
P11-N	TB1-B78	A 526R	400 CPS 115 V HI	
P12-A	TB1-K77	A 530	+28 VDC AGC BUSS B	
P12-A	J23- 39	A 531	+28 VDC AGC BUSS B	168
P12-A	J23- 40	A 532	+28 VDC AGC BUSS B	168
P12-B	TB1-K75	A 533	+28 VDC IMU BUSS B	
P12-B	TB1-K75	A 534	+28 VDC IMU BUSS B	
P12-B	TB1-K75	A 535	+28 VDC IMU BUSS B	
P12-C	TB1-H75	A 536	+28 VDC IMU BUSS B	
P12-C	TB1-H75	A 537	+28 VDC IMU BUSS B	
P12-C	TB1-H75	A 538	+28 VDC IMU BUSS B	
P12-D	TB1-C70	A 539	0 VDC IMU	
P12-D	TB1-D73	A 540	0 VDC IMU	
P12-E	TB1-F74	A 541	0 VDC IMU	
P12-E	TB1-B69	A 542	0 VDC IMU	
P12-F	TB1-C68	A 543	0 VDC IMU	
P12-F	TB1-D75	A 544	0 VDC IMU	
P12-G	TB1-D78	A 545	0 VDC OPTICS	
P12-G	TB1-G53	A 546	0 VDC OPTICS	
P12-G	TB1-G50	A 547	0 VDC OPTICS	
P12-H	TB1-G77	A 548	+28 VDC OPTICS BUSS B	
P12-H	TB1-G77	A 549	+28 VDC OPTICS BUSS B	
P12-H	TB1-H77	A 550	+28 VDC OPTICS BUSS B	
P12-J	J23- 41	A 551	0 VDC AGC	170
P12-J	J23- 66	A 552	0 VDC AGC	170
P12-J	P11-J	A 525	0 VDC AGC	
P12-L	TB1-K70	A 553	STRUCTURE GROUND	
P12-M	TB1-G75	A 554	+28 VDC STBY BUSS B	
P12-M	TB1-G75	A 555	+28 VDC STBY BUSS B	

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FROM	TO	COND NO	CIRCUIT FUNCTION
P13- 1	TB1-C66	A 490R	TRACKER AUTOMATIC GAIN CONTROL HI
P13- 2	TB1-D66	A 491R	TRACKER PREAMP OUTPUT HI
P13- 5	TB1-G55	A 493R	TRACKER X DRIVE BUFFERED HI
P13- 6	TB1-G54	A 494R	TRACKER Y DRIVE BUFFERED HI
P13- 7	TB1-F57	A 495Y	TRACKER PREAMP OUTPUT BUFFERED LO
P13- 9	TB1-C65	A 490Y	TRACKER AUTOMATIC GAIN CONTROL LO
P13- 10	TB1-D65	A 491Y	TRACKER PREAMP OUTPUT LO
P13- 13	TB1-F56	A 493Y	TRACKER X DRIVE BUFFERED LO
P13- 14	TB1-F56	A 494Y	TRACKER Y DRIVE BUFFERED LO
P13- 15	TB1-G56	A 495R	TRACKER PREAMP OUTPUT BUFFERED HI
P13- 23	TB1-F65	A 496Y	TRACKER Y ERROR LO
P13- 24	TB1-G65	A 497Y	TRACKER X ERROR LO
P13- 27	TB1-A65	A 498Y	TRACKER Y REFERENCE
P13- 28	TB1-A66	A 498R	TRACKER Y REFERENCE
P13- 30	TB1-D76	A 594Y	0 VDC OPTICS
P13- 31	TB1-F66	A 496R	TRACKER Y ERROR HI
P13- 32	TB1-G66	A 497R	TRACKER X ERROR HI
P13- 35	TB1-B66	A 499R	TRACKER X REFERENCE
P13- 36	TB1-B65	A 499Y	TRACKER X REFERENCE
P13- 37	TB1-K70	A 500	STRUCTURE GROUND
P13- 38	TB1-B71	A 594R	+28 VDC OPTICS TRACKER POWER
SHLD A 3	TB1-A12	A 3B	0 VDC IMU
SHLD A 4	TB1-A17	A 4B	0 VDC IMU
SHLD A 12	TB1-K32	A 12B	IG CDU ERROR SIG RET
SHLD A 16	TB1-H17	A 16B	0 VDC IMU
SHLD A 17	TB1-K17	A 17B	0 VDC IMU
SHLD A 18	TB1-K30	A 18B	IG CDU ERROR SIG RET
SHLD A 19	TB1-F30	A 19B	IG CDU MDA INPUT RET
SHLD A 20	TB1-F34	A 20B	IG CDU ENCODER COMMON
SHLD A 23	TB1-B12	A 23B	0 VDC IMU

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FROM	TO	COND NO	CIRCUIT FUNCTION
SHLD A 24	TB1-B17	A 24B	0 VDC IMU
SHLD A 32	TB1-H32	A 32B	MG CDU ERROR SIG RET
SHLD A 36	TB1-H12	A 36B	0 VDC IMU
SHLD A 37	TB1-K12	A 37B	0 VDC IMU
SHLD A 38	TB1-H30	A 38B	MG CDU ERROR SIG RET
SHLD A 39	TB1-D30	A 39B	MG CDU MDA INPUT RET
SHLD A 40	TB1-D34	A 40B	MG CDU ENCODER COMMON
SHLD A 43	TB1-C17	A 43B	0 VDC IMU
SHLD A 44	TB1-D17	A 44B	0 VDC IMU
SHLD A 52	TB1-G32	A 52B	OG CDU ERROR SIG RET
SHLD A 56	TB1-F17	A 56B	0 VDC IMU
SHLD A 57	TB1-G17	A 57B	0 VDC IMU
SHLD A 59	TB1-F32	A 59B	OG CDU ERROR SIG RET
SHLD A 60	TB1-C30	A 60B	OG CDU MDA INPUT RET
SHLD A 61	TB1-C34	A 61B	OG CDU ENCODER COMMON
SHLD A 64	TB1-H47	A 64B	0 VDC OPTICS
SHLD A 65	TB1-K47	A 65B	0 VDC OPTICS
SHLD A 66	TB1-H39	A 66B	0 VDC OPTICS
SHLD A 72	TB1-C47	A 72B	0 VDC OPTICS
SHLD A 73	TB1-D47	A 73B	0 VDC OPTICS
SHLD A 74	TB1-A47	A 74B	0 VDC OPTICS
SHLD A 75	TB1-B47	A 75B	0 VDC OPTICS
SHLD A 76	TB1-G39	A 76B	0 VDC OPTICS
SHLD A 77	TB1-G36	A 77B	0 VDC OPTICS
SHLD A 78	TB1-A34	A 78B	SHAFT CDU ENCODER COMMON
SHLD A 81	TB1-D39	A 81B	0 VDC OPTICS
SHLD A 82	TB1-D42	A 82B	0 VDC OPTICS
SHLD A 83	TB1-C42	A 83B	0 VDC OPTICS
SHLD A 89	TB1-H42	A 89B	0 VDC OPTICS
SHLD A 90	TB1-K42	A 90B	0 VDC OPTICS
SHLD A 91	TB1-A42	A 91B	0 VDC OPTICS
SHLD A 92	TB1-B42	A 92B	0 VDC OPTICS

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FROM	TO	COND NO	CIRCUIT FUNCTION
SHLD A 93	TB1-C42	A 93B	0 VDC OPTICS
SHLD A 94	TB1-C36	A 94B	0 VDC OPTICS
SHLD A 95	TB1-B34	A 95B	TRUNNION CDU ENCODER COMMON
SHLD A 99	TB1-A49	A 99B	STRUCTURE GROUND
SHLD A 104	TB1-H 4	A 104B	STRUCTURE GROUND
SHLD A 113	TB1-D56	A 113B	AGC SIGNAL 178 SHIELD RETURN
SHLD A 114	E 22	A 114B	AGC SIGNAL 178 SHIELD RETURN
SHLD A 124	TB1-K 4	A 124B	STRUCTURE GROUND
SHLD A 127	TB1-A49	A 127B	STRUCTURE GROUND
SHLD A 128	TB1-G 4	A 128B	STRUCTURE GROUND
SHLD A 130	TB1-B49	A 130B	STRUCTURE GROUND
SHLD A 131	E 22	A 131B	AGC SIGNAL 178 SHIELD RETURN
SHLD A 132	E 22	A 132B	AGC SIGNAL 178 SHIELD RETURN
SHLD A 133	E 22	A 133B	AGC SIGNAL 178 SHIELD RETURN
SHLD A 134	TB1-D56	A 134B	AGC SIGNAL 178 SHIELD RETURN
SHLD A 135	TB1-K32	A 135B	IG CDU ERROR SIG RET
SHLD A 136	E 22	A 136B	AGC SIGNAL 178 SHIELD RETURN
SHLD A 139	TB1-H32	A 139B	MG CDU ERROR SIG RET
SHLD A 145	TB1-G32	A 145B	OG CDU ERROR SIG RET
SHLD A 179	TB1-A12	A 179B	0 VDC IMU
SHLD A 180	TB1-F17	A 180B	0 VDC IMU
SHLD A 181	TB1-G17	A 181B	0 VDC IMU
SHLD A 182	TB1-A17	A 182B	0 VDC IMU
SHLD A 183	TB1-H12	A 183B	0 VDC IMU
SHLD A 184	TB1-K12	A 184B	0 VDC IMU
SHLD A 185	TB1-B12	A 185B	0 VDC IMU
SHLD A 186	TB1-B17	A 186B	0 VDC IMU
SHLD A 188	TB1-H12	A 188B	0 VDC IMU
SHLD A 189	TB1-H17	A 189B	0 VDC IMU
SHLD A 190	TB1-K17	A 190B	0 VDC IMU
SHLD A 191	TB1-G27	A 191B	0 VDC IMU
SHLD A 193	TB1-G27	A 193B	0 VDC IMU

(CONT.)

FROM	TO	COND NO	CIRCUIT FUNCTION
SHLD A 196	TB1-C17	A 196B	0 VDC IMU
SHLD A 198	TB1-D17	A 198B	0 VDC IMU
SHLD A 200	TB1-K28	A 200B	IG CDU ERROR SIG RET
SHLD A 203	TB1-H28	A 203B	MG CDU ERROR SIG RET
SHLD A 204	TB1-G12	A 204B	0 VDC IMU
SHLD A 205	TB1-F12	A 205B	0 VDC IMU
SHLD A 211	TB1-C47	A 211B	0 VDC OPTICS
SHLD A 213	TB1-D47	A 213B	0 VDC OPTICS
SHLD A 216	TB1-A67	A 216B	0 VDC OPTICS
SHLD A 218	TB1-B67	A 218B	0 VDC OPTICS
SHLD A 219	TB1-H36	A 219B	0 VDC OPTICS
SHLD A 221	TB1-D36	A 221B	0 VDC OPTICS
SHLD A 223	TB1-D42	A 223B	0 VDC OPTICS
SHLD A 224	TB1-C42	A 224B	0 VDC OPTICS
SHLD A 226	TB1-G47	A 226B	0 VDC OPTICS
SHLD A 227	TB1-F47	A 227B	0 VDC OPTICS
SHLD A 228	TB1-D67	A 228B	0 VDC OPTICS
SHLD A 232	TB1-C67	A 232B	0 VDC OPTICS
SHLD A 234	TB1-B47	A 234B	0 VDC OPTICS
SHLD A 235	TB1-K67	A 235B	0 VDC OPTICS
SHLD A 236	TB1-A47	A 236B	0 VDC OPTICS
SHLD A 238	TB1-A42	A 238B	0 VDC OPTICS
SHLD A 239	TB1-H67	A 239B	0 VDC OPTICS
SHLD A 240	TB1-B42	A 240B	0 VDC OPTICS
SHLD A 254	TB1-C59	A 254B	0 VDC IMU
SHLD A 255	TB1-C59	A 255B	0 VDC IMU
SHLD A 257	TB1-C24	A 257B	0 VDC IMU
SHLD A 260	TB1-F24	A 260B	0 VDC IMU
SHLD A 262	TB1-D24	A 262B	0 VDC IMU
SHLD A 263	TB1-G24	A 263B	0 VDC IMU
SHLD A 264	TB1-H24	A 264B	0 VDC IMU
SHLD A 265	TB1-K24	A 265B	0 VDC IMU

(CONT.)

FROM	TO	COND NO	CIRCUIT FUNCTION
SHLD A 269	TB1-F42	A 269B	0 VDC OPTICS
SHLD A 270	TB1-G42	A 270B	0 VDC OPTICS
SHLD A 271	TB1-F39	A 271B	0 VDC OPTICS
SHLD A 276	P08- 35	A 276A	0 VDC OPTICS
SHLD A 276	TB1-F36	A 276B	0 VDC OPTICS
SHLD A 278	P08- 37	A 278A	0 VDC OPTICS
SHLD A 278	TB1-K36	A 278B	0 VDC OPTICS
SHLD A 279	TB1-G47	A 279B	0 VDC OPTICS
SHLD A 280	TB1-F47	A 280B	0 VDC OPTICS
SHLD A 281	TB1-K39	A 281B	0 VDC OPTICS
SHLD A 286	TB1-A59	A 286B	STRUCTURE GROUND
SHLD A 290	TB1-K67	A 290B	0 VDC OPTICS
SHLD A 291	TB1-H67	A 291B	0 VDC OPTICS
SHLD A 298	E 24	A 298A	AGC SIGNAL 178 SHIELD RETURN
SHLD A 301	E 24	A 301A	AGC SIGNAL 178 SHIELD RETURN
SHLD A 302	TB1-F67	A 302B	0 VDC OPTICS
SHLD A 304	E 23	A 304B	AGC SIGNAL 178 SHIELD RETURN
SHLD A 305	TB1-G67	A 305B	0 VDC OPTICS
SHLD A 308	E 24	A 308A	AGC SIGNAL 178 SHIELD RETURN
SHLD A 308	TB1-A70	A 308B	AGC SIGNAL 178 SHIELD RETURN
SHLD A 309	E 24	A 309A	AGC SIGNAL 178 SHIELD RETURN
SHLD A 309	E 23	A 309B	AGC SIGNAL 178 SHIELD RETURN
SHLD A 313	TB1-A58	A 313B	STRUCTURE GROUND
SHLD A 332	TB1-A17	A 332B	0 VDC IMU
SHLD A 333	TB1-A12	A 333B	0 VDC IMU
SHLD A 334	TB1-D17	A 334B	0 VDC IMU
SHLD A 338	TB1-F32	A 338B	OG CDU ERROR SIG RET
SHLD A 346	TB1-B17	A 346B	0 VDC IMU
SHLD A 347	TB1-B12	A 347B	0 VDC IMU
SHLD A 348	TB1-C17	A 348B	0 VDC IMU
SHLD A 354	TB1-K32	A 354B	IG CDU ERROR SIG RET
SHLD A 355	TB1-H32	A 355B	MG CDU ERROR SIG RET

(CONT.)

FROM	TO	COND NO	CIRCUIT FUNCTION
SHLD A 365	TB1-G32	A 365B	OG CDU ERROR SIG RET
SHLD A 379	TB1-F27	A 379B	0 VDC IMU
SHLD A 380	TB1-F27	A 380B	0 VDC IMU
SHLD A 413	TB1-A58	A 413B	STRUCTURE GROUND
SHLD A 414	E 23	A 414B	AGC SIGNAL 178 SHIELD RETURN
SHLD A 416	TB1-A70	A 416B	AGC SIGNAL 178 SHIELD RETURN
SHLD A 417	E 23	A 417B	AGC SIGNAL 178 SHIELD RETURN
SHLD A 472	TB1-A59	A 472B	STRUCTURE GROUND
SHLD A 474	TB1-A49	A 474B	STRUCTURE GROUND
SHLD A 475	TB1-B49	A 475B	STRUCTURE GROUND
SHLD A 476	TB1-B49	A 476B	STRUCTURE GROUND
SHLD A 490	TB1-C67	A 490B	0 VDC OPTICS
SHLD A 491	TB1-D67	A 491B	0 VDC OPTICS
SHLD A 496	TB1-F67	A 496B	0 VDC OPTICS
SHLD A 497	TB1-G67	A 497B	0 VDC OPTICS
SHLD A 498	TB1-A67	A 498B	0 VDC OPTICS
SHLD A 499	TB1-B67	A 499B	0 VDC OPTICS
SHLD A 564	TB1-A70	A 564B	AGC SIGNAL 178 SHIELD RETURN
SHLD A 566	E 23	A 566A	AGC SIGNAL 178 SHIELD RETURN
SHLD BB 50	J17-S4	BB 50B	0 VDC IMU
SHLD BB 94	E 4	BB 94B	0 VDC IMU
SHLD CC 1	E 4	CC 1A	0 VDC IMU
SHLD CC 2	E 4	CC 2A	0 VDC IMU
SHLD CC 3	J12-K3	CC 3A	STRUCTURE GROUND
SHLD CC 6	E 4	CC 6A	0 VDC IMU
SHLD CC 7	E 4	CC 7A	0 VDC IMU
SHLD CC 8	E 18	CC 8B	AGC SIGNAL 179 SHIELD RETURN
SHLD CC 9	E 18	CC 9B	AGC SIGNAL 179 SHIELD RETURN
SHLD CC 10	E 18	CC 10B	AGC SIGNAL 179 SHIELD RETURN
SHLD CC 13	E 7	CC 13A	0 VDC IMU
SHLD CC 14	E 7	CC 14A	0 VDC IMU
SHLD CC 15	E 7	CC 15A	0 VDC IMU

(CONT.)

FROM	TO	COND NO	CIRCUIT FUNCTION
SHLD CC 16	E 7	CC 16A	0 VDC IMU
SHLD CC 17	E 7	CC 17A	0 VDC IMU
SHLD CC 18	E 7	CC 18A	0 VDC IMU
SHLD CC 19	E 7	CC 19A	0 VDC IMU
SHLD CC 20	E 17	CC 20B	AGC SIGNAL 179 SHIELD RETURN
SHLD CC 21	E 17	CC 21B	AGC SIGNAL 179 SHIELD RETURN
SHLD CC 22	E 17	CC 22B	AGC SIGNAL 179 SHIELD RETURN
SHLD CC 23	E 17	CC 23B	AGC SIGNAL 179 SHIELD RETURN
SHLD CC 24	E 17	CC 24B	AGC SIGNAL 179 SHIELD RETURN
SHLD CC 25	E 17	CC 25B	AGC SIGNAL 179 SHIELD RETURN
SHLD CC 26	E 19	CC 26B	AGC SIGNAL 179 SHIELD RETURN
SHLD CC 27	E 19	CC 27B	AGC SIGNAL 179 SHIELD RETURN
SHLD CC 28	E 19	CC 28B	AGC SIGNAL 179 SHIELD RETURN
SHLD CC 29	E 19	CC 29B	AGC SIGNAL 179 SHIELD RETURN
SHLD CC 30	E 19	CC 30B	AGC SIGNAL 179 SHIELD RETURN
SHLD CC 31	E 19	CC 31B	AGC SIGNAL 179 SHIELD RETURN
SHLD CC 32	E 9	CC 32A	IG DAC MDA SIG LO
SHLD CC 33	E 9	CC 33A	IG DAC MDA SIG LO
SHLD CC 34	E 11	CC 34A	MG DAC MDA SIG LO
SHLD CC 35	E 11	CC 35A	MG DAC MDA SIG LO
SHLD CC 36	E 13	CC 36A	OG DAC MDA SIG LO
SHLD CC 37	E 13	CC 37A	OG DAC MDA SIG LO
SHLD CC 38	E 21	CC 38B	AGC SIGNAL 178 SHIELD RETURN
SHLD CC 39	J16-P2	CC 39A	0 VDC IMU
SHLD CC 40	J16-P2	CC 40A	0 VDC IMU
SHLD CC 41	E 21	CC 41B	AGC SIGNAL 178 SHIELD RETURN
SHLD CC 42	E 20	CC 42B	AGC SIGNAL 179 SHIELD RETURN
SHLD CC 43	J22- 48	CC 43B	NAA SHIELD GROUND
SHLD CC 44	J22- 77	CC 44B	NAA SHIELD GROUND
SHLD CC 45	J22- 80	CC 45B	NAA SHIELD GROUND
SHLD CC 46	E 20	CC 46B	AGC SIGNAL 179 SHIELD RETURN
SHLD CC 47	J22- 54	CC 47B	NAA SHIELD GROUND

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FROM	TO	COND NO	CIRCUIT FUNCTION
SHLD CC 48	J22- 51	CC 48B	NAA SHIELD GROUND
SHLD CC 49	E 20	CC 49B	AGC SIGNAL 179 SHIELD RETURN
SHLD CC 50	E 20	CC 50B	AGC SIGNAL 179 SHIELD RETURN
SHLD CC 51	J17-84	CC 51A	0 VDC IMU
SHLD CC 57	J20-M4	CC 57A	STRUCTURE GROUND
SHLD CC 96	TB1-K24	CC 96B	0 VDC IMU
SHLD CC 99	TB1-H24	CC 99B	0 VDC IMU
SHLD CC101	TB1-F24	CC101B	0 VDC IMU
SHLD CC106	TB1-G24	CC106B	0 VDC IMU
SHLD CC108	TB1-D24	CC108B	0 VDC IMU
SHLD CC109	TB1-C24	CC109B	0 VDC IMU
SHLD CC126	TB1-K17	CC126B	0 VDC IMU
SHLD CC127	TB1-K12	CC127B	0 VDC IMU
SHLD CC128	TB1-H 4	CC128B	STRUCTURE GROUND
SHLD CC136	J16-B1	CC136A	IG CDU MDA INPUT RET
SHLD CC141	J16-B3	CC141A	MG CDU MDA INPUT RET
SHLD CC143	TB1-C17	CC143B	0 VDC IMU
SHLD CC144	TB1-D17	CC144B	0 VDC IMU
SHLD CC148	TB1-F17	CC148B	0 VDC IMU
SHLD CC152	TB1-G17	CC152B	0 VDC IMU
SHLD CC153	J16-B5	CC153A	OG CDU MDA INPUT RET
SHLD CC159	TB1-K 4	CC159B	STRUCTURE GROUND
SHLD CC163	TB1-H17	CC163B	0 VDC IMU
SHLD CC164	TB1-H12	CC164B	0 VDC IMU
SHLD CC173	TB1-D56	CC173B	AGC SIGNAL 178 SHIELD RETURN
SHLD CC182	TB1-G12	CC182B	0 VDC IMU
SHLD CC190	TB1-C59	CC190B	0 VDC IMU
SHLD CC192	TB1-C59	CC192B	0 VDC IMU
SHLD CC201	TB1-F12	CC201B	0 VDC IMU
SHLD CC204	TB1-G32	CC204B	OG CDU ERROR SIG RET
SHLD CC218	TB1-D47	CC218B	0 VDC OPTICS
SHLD CC219	TB1-B47	CC219B	0 VDC OPTICS

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FROM	TO	COND NO	CIRCUIT FUNCTION
SHLD CC221	TB1-G42	CC221B	0 VDC OPTICS
SHLD CC223	TB1-A58	CC223B	STRUCTURE GROUND
SHLD CC225	TB1-A59	CC225B	STRUCTURE GROUND
SHLD CC229	TB1-D42	CC229B	0 VDC OPTICS
SHLD CC230	TB1-C42	CC230B	0 VDC OPTICS
SHLD CC231	TB1-F42	CC231B	0 VDC OPTICS
SHLD CC233	TB1-D36	CC233B	0 VDC OPTICS
SHLD CC234	TB1-B42	CC234B	0 VDC OPTICS
SHLD CC235	TB1-K39	CC235B	0 VDC OPTICS
SHLD CC237	TB1-K36	CC237B	0 VDC OPTICS
SHLD CC239	TB1-H36	CC239B	0 VDC OPTICS
SHLD CC251	TB1-A59	CC251B	STRUCTURE GROUND
SHLD CC253	TB1-K42	CC253B	0 VDC OPTICS
SHLD CC254	TB1-H42	CC254B	0 VDC OPTICS
SHLD CC255	TB1-D39	CC255B	0 VDC OPTICS
SHLD CC256	TB1-C42	CC256B	0 VDC OPTICS
SHLD CC258	TB1-C36	CC258B	0 VDC OPTICS
SHLD CC259	TB1-F39	CC259B	0 VDC OPTICS
SHLD CC261	TB1-F36	CC261B	0 VDC OPTICS
SHLD CC263	TB1-H39	CC263B	0 VDC OPTICS
SHLD CC265	TB1-H47	CC265B	0 VDC OPTICS
SHLD CC266	TB1-K47	CC266B	0 VDC OPTICS
SHLD CC267	TB1-G39	CC267B	0 VDC OPTICS
SHLD CC269	TB1-G36	CC269B	0 VDC OPTICS
SHLD CC276	TB1-A58	CC276B	STRUCTURE GROUND
SHLD CC278	TB1-K67	CC278B	0 VDC OPTICS
SHLD CC281	TB1-G67	CC281B	0 VDC OPTICS
SHLD CC325	TB1-G 4	CC325B	STRUCTURE GROUND
SHLD CC327	TB1-B17	CC327B	0 VDC IMU
SHLD CC328	TB1-B12	CC328B	0 VDC IMU
SHLD CC329	TB1-A17	CC329B	0 VDC IMU
SHLD CC330	TB1-A12	CC330B	0 VDC IMU

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FROM	TO	COND NO	CIRCUIT FUNCTION
SHLD CC332	E 21	CC332A	AGC SIGNAL 178 SHIELD RETURN
SHLD CC332	TB1-D56	CC332B	AGC SIGNAL 178 SHIELD RETURN
TB1-A 1	TB1-A 2	TB 1	400 CPS VARIABLE ILLUMINATION POWER
TB1-A 1	J01- 28	A 8R	400 CPS VARIABLE ILLUMINATION POWER
TB1-A 1	J02- 28	A 28R	400 CPS VARIABLE ILLUMINATION POWER
TB1-A 1	J03- 28	A 48R	400 CPS VARIABLE ILLUMINATION POWER
TB1-A 2	TB1-A 3	TB 1	400 CPS VARIABLE ILLUMINATION POWER
TB1-A 2	J04- 28	A 67R	400 CPS VARIABLE ILLUMINATION POWER
TB1-A 2	J05- 28	A 85R	400 CPS VARIABLE ILLUMINATION POWER
TB1-A 2	P01-103	A 143R	400 CPS VARIABLE ILLUMINATION POWER
TB1-A 2	TB1-A 1	TB 1	400 CPS VARIABLE ILLUMINATION POWER
TB1-A 3	TB1-A 4	TB 1	400 CPS VARIABLE ILLUMINATION POWER
TB1-A 3	J06-108	A 123R	400 CPS VARIABLE ILLUMINATION POWER
TB1-A 3	P05- 43	A 225R	400 CPS VARIABLE ILLUMINATION POWER
TB1-A 3	J09- 54	A 312R	400 CPS VARIABLE ILLUMINATION POWER
TB1-A 3	TB1-A 2	TB 1	400 CPS VARIABLE ILLUMINATION POWER
TB1-A 4	P01-108	A 143Y	400 CPS VARIABLE ILLUMINATION POWER
TB1-A 4	P08- 53	A 282R	400 CPS VARIABLE ILLUMINATION POWER
TB1-A 4	P08- 56	A 283R	400 CPS VARIABLE ILLUMINATION POWER
TB1-A 4	TB1-A 3	TB 1	400 CPS VARIABLE ILLUMINATION POWER
TB1-A 5	TB1-A 6	TB 8	800 CPS 28 V 1 PCT HI IMU
TB1-A 5	J02- 11	A 25G	800 CPS 28 V 1 PCT HI IMU
TB1-A 5	J02- 25	A 25R	800 CPS 28 V 1 PCT HI IMU
TB1-A 5	P02-A	A 178R	800 CPS 28 V 1 PCT HI IMU
TB1-A 5	J16-54	CC160L	800 CPS 28 V 1 PCT HI IMU
TB1-A 6	TB1-A 7	TB 8	800 CPS 28 V 1 PCT HI IMU
TB1-A 6	J01- 11	A 5G	800 CPS 28 V 1 PCT HI IMU
TB1-A 6	J01- 25	A 5R	800 CPS 28 V 1 PCT HI IMU
TB1-A 6	J03- 25	A 45R	800 CPS 28 V 1 PCT HI IMU
TB1-A 6	TB1-A 5	TB 8	800 CPS 28 V 1 PCT HI IMU

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FROM	TO	COND NO	CIRCUIT FUNCTION
TB1-A 7	TB1-A 8	TB 8	800 CPS 28 V 1 PCT HI IMU
TB1-A 7	J03- 11	A 45G	800 CPS 28 V 1 PCT HI IMU
TB1-A 7	P01- 11	A 126R	800 CPS 28 V 1 PCT HI IMU
TB1-A 7	P09- 11	A 340R	800 CPS 28 V 1 PCT HI IMU
TB1-A 7	TB1-A 6	TB 8	800 CPS 28 V 1 PCT HI IMU
TB1-A 8	J01- 1	A 1R	800 CPS 28 V 1 PCT HI IMU
TB1-A 8	J02- 1	A 21R	800 CPS 28 V 1 PCT HI IMU
TB1-A 8	J03- 1	A 41R	800 CPS 28 V 1 PCT HI IMU
TB1-A 8	TB1-A 7	TB 8	800 CPS 28 V 1 PCT HI IMU
TB1-A10	P07-F*	A 261G	OG ADA
TB1-A10	J11-G1	CC 65K	OG ADA
TB1-A11	P07-G*	A 261N	MG ADA
TB1-A11	J11-H1	CC 65L	MG ADA
TB1-A12	SHLD A 3	A 3B	0 VDC IMU
TB1-A12	SHLD A 179	A 179B	0 VDC IMU
TB1-A12	SHLD A 333	A 333B	0 VDC IMU
TB1-A12	TB1-B17	AA 1	0 VDC IMU
TB1-A12	SHLD CC330	CC330B	0 VDC IMU
TB1-A12	TB1-B12	TB 14	0 VDC IMU
TB1-A13	J01- 20	A 3R	COS AIG 1X P3
TB1-A13	P02-A*	A 179R	COS AIG 1X S3
TB1-A13	P09- 2	A 333Y	COS AIG 1X
TB1-A13	J22- 84	CC330R	COS AIG 1X
TB1-A14	J01- 6	A 3Y	COS AIG 1X RET P1
TB1-A14	P02-B*	A 179Y	COS AIG 1X RET S1
TB1-A14	P09- 3	A 333R	COS AIG 1X RET
TB1-A14	J22- 85	CC330W	COS AIG 1X RET
TB1-A15	J01- 21	A 4R	SIN AIG 1X RET P4
TB1-A15	P02-F*	A 182R	SIN AIG 1X RET S2
TB1-A15	P09- 23	A 332R	SIN AIG 1X RET
TB1-A15	J22- 33	CC329W	SIN AIG 1X RET
TB1-A16	J01- 7	A 4Y	SIN AIG 1X P2

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FROM	TO	COND NO	CIRCUIT FUNCTION	
TB1-A16	P02-G*	A 182Y	SIN AIG 1X S4	
TB1-A16	P09- 1	A 332Y	SIN AIG 1X	
TB1-A16	J22- 56	CC329R	SIN AIG 1X	
TB1-A17	SHLD A 4	A 4B	0 VDC IMU	
TB1-A17	SHLD A 182	A 182B	0 VDC IMU	
TB1-A17	SHLD A 332	A 332B	0 VDC IMU	
TB1-A17	TB1-C24	AA 2	0 VDC IMU	
TB1-A17	SHLD CC329	CC329B	0 VDC IMU	
TB1-A17	TB1-B17	TB 15	0 VDC IMU	
TB1-A20	J08- 50	A 158	SPARE FAIL LIGHT 1 HI	
TB1-A20	J10- 7	A 479	SPARE FAIL LIGHT 1 HI	305
TB1-A21	J08- 41	A 155	ZERO ENCODER LIGHT HI	
TB1-A21	J10- 3	A 473G	ZERO ENCODER LIGHT HI	301
TB1-A22	J08- 60	A 162	IMU FAIL LIGHT HI	
TB1-A22	J10- 6	A 478	IMU FAIL LIGHT HI	304
TB1-A23	J08- 18	A 147	GIMBAL LOCK LIGHT HI	
TB1-A23	P10- 24	A 415	GIMBAL LOCK LIGHT HI	
TB1-A24	J08- 72	A 169	CDU FAIL LIGHT HI	
TB1-A24	J10- 4	A 473R	CDU FAIL LIGHT HI	302
TB1-A25	J08- 31	A 152	IMU DELAY LIGHT LO	
TB1-A25	J09-107	A 589	IMU DELAY LIGHT LO	
TB1-A26	P01- 26	A 129	IMU DELAY LIGHT HI	
TB1-A26	J08- 42	A 156	IMU DELAY LIGHT HI	
TB1-A26	P09- 69	A 373	IMU DELAY LIGHT HI	
TB1-A28	P03-C	A 195R	IMU OG ERROR SIG	
TB1-A28	P09-111	A 390Y	IMU OG ERROR SIG	
TB1-A28	J11-A6	CC 68L	IMU OG ERROR SIG	
TB1-A29	J03- 67	A 55R	OG CDU 1/2X ERROR SIG	
TB1-A29	J16-D5	CC145W	OG CDU 1/2X ERROR SIG	
TB1-A30	J02- 67	A 35R	MG CDU 1/2X ERROR SIG	
TB1-A30	J16-D3	CC138W	MG CDU 1/2X ERROR SIG	
TB1-A31	J01- 67	A 15R	IG CDU 1/2X ERROR SIG S3	

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FROM	TO	COND NO	CIRCUIT FUNCTION
TB1-A31	J16-D1	CC133W	IG CDU 1/2X ERROR SIG
TB1-A33	J04-108	A 78R	SHAFT CDU ENCODER PHASE 2
TB1-A33	J17-F9	CC203R	SHAFT CDU ENCODER PHASE 2
TB1-A34	SHLD A 78	A 78B	SHAFT CDU ENCODER COMMON
TB1-A34	J04- 94	A 78Y	SHAFT CDU ENCODER COMMON
TB1-A34	J17-D9	CC203W	SHAFT CDU ENCODER COMMON
TB1-A35	J04-107	A 78G	SHAFT CDU ENCODER PHASE 1
TB1-A35	J17-C9	CC203L	SHAFT CDU ENCODER PHASE 1
TB1-A36	TB1-B36	TB 23	0 VDC OPTICS
TB1-A39	TB1-B36	AA 3	0 VDC OPTICS
TB1-A39	TB1-B39	TB 24	0 VDC OPTICS
TB1-A40	P09- 96	A 391R	Y PIP ERROR MONITOR
TB1-A40	J13-F2	CC100	Y PIP ERROR MONITOR
TB1-A41	P09-113	A 391Y	Z PIP ERROR MONITOR
TB1-A41	J14-H6	CC107	Z PIP ERROR MONITOR
TB1-A42	SHLD A 91	A 91B	0 VDC OPTICS
TB1-A42	SHLD A 238	A 238B	0 VDC OPTICS
TB1-A42	TB1-B39	AA 4	0 VDC OPTICS
TB1-A42	TB1-B42	TB 25	0 VDC OPTICS
TB1-A43	J05-100	A 91R	TRUNNION CDU 16X RSVR P3
TB1-A43	P05- 87	A 238R	SXT TRUNNION 64X RSVR S3
TB1-A44	J05- 86	A 91Y	TRUNNION CDU 16X RSVR P1
TB1-A44	P05- 86	A 238Y	SXT TRUNNION 64X RSVR S1
TB1-A45	J04- 86	A 74Y	SHAFT CDU 16X RSVR P1
TB1-A45	P05- 82	A 236Y	SXT SHAFT 16X RSVR S1
TB1-A46	J04-100	A 74R	SHAFT CDU 16X RSVR P3
TB1-A46	P05- 83	A 236R	SXT SHAFT 16X RSVR S3
TB1-A47	SHLD A 74	A 74B	0 VDC OPTICS
TB1-A47	SHLD A 236	A 236B	0 VDC OPTICS
TB1-A47	TB1-B42	AA 5	0 VDC OPTICS
TB1-A47	TB1-B47	TB 26	0 VDC OPTICS
TB1-A48	J06- 12	A 99Y	MODE RELAY COMMON TO AGC

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FROM	TO	COND NO	CIRCUIT FUNCTION	
TB1-A48	J10- 26	A 474R	MODE RELAY COMMON TO AGC	312
TB1-A48	J10- 13	A 474Y	MODE RELAY COMMON TO AGC	315
TB1-A49	SHLD A 99	A 99B	STRUCTURE GROUND	
TB1-A49	SHLD A 127	A 127B	STRUCTURE GROUND	
TB1-A49	SHLD A 474	A 474B	STRUCTURE GROUND	
TB1-A49	TB1-B49	TB 27	STRUCTURE GROUND	
TB1-A50	P01- 48	A 127G	COARSE ALIGN MODE COMMAND FROM AGC	
TB1-A50	J10- 22	A 475G	COARSE ALIGN MODE COMMAND FROM AGC	308
TB1-A51	J08- 93	A 176	STEP-DOWN-R	
TB1-A51	J09- 93	A 327	STEP-DOWN-R	
TB1-A52	J08- 79	A 172	STEP-DOWN-C	
TB1-A52	J09- 79	A 323	STEP-DOWN-C	
TB1-A53	J08- 67	A 166	+28 VDC MDV SWITCHED	
TB1-A53	J09- 67	A 316	+28 VDC MDV SWITCHED	
TB1-A54	P01- 80	A 138R	PANEL BRIGHTNESS CONTROL	
TB1-A54	J09- 32	A 300R	PANEL BRIGHTNESS CONTROL	
TB1-A55	P01- 95	A 138Y	PANEL BRIGHTNESS CONTROL	
TB1-A55	J09- 44	A 300Y	PANEL BRIGHTNESS CONTROL	
TB1-A56	P03-J*	A 202	GIMBAL LOCK SIGNAL	
TB1-A56	P09- 85	A 385	GIMBAL LOCK SIGNAL	
TB1-A56	P10- 12	A 410	GIMBAL LOCK SIGNAL	
TB1-A57	J09- 82	A 313G	RESOLVED MODE RELAY COMMAND	
TB1-A57	J19-P6	CC251R	RESOLVED MODE RELAY COMMAND	
TB1-A58	SHLD A 313	A 313B	STRUCTURE GROUND	
TB1-A58	SHLD A 413	A 413B	STRUCTURE GROUND	
TB1-A58	SHLD CC223	CC223B	STRUCTURE GROUND	
TB1-A58	SHLD CC276	CC276B	STRUCTURE GROUND	
TB1-A58	TB1-A59	TB 31	STRUCTURE GROUND	
TB1-A59	SHLD A 286	A 286B	STRUCTURE GROUND	
TB1-A59	SHLD A 472	A 472B	STRUCTURE GROUND	
TB1-A59	SHLD CC225	CC225B	STRUCTURE GROUND	
TB1-A59	SHLD CC251	CC251B	STRUCTURE GROUND	

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FROM	TO	COND NO	CIRCUIT FUNCTION	
TB1-A59	TB1-A60	TB 31	STRUCTURE GROUND	
TB1-A59	TB1-A58	TB 31	STRUCTURE GROUND	
TB1-A60	J16-N4	CC180	STRUCTURE GROUND	
TB1-A60	TB1-A59	TB 31	STRUCTURE GROUND	
TB1-A61	J09- 2	A 286R	TRACKER MODE RELAY COMMAND	
TB1-A61	J10- 66	A 472R	TRACKER MODE RELAY COMMAND	317
TB1-A61	J19-R6	CC251W	TRACKER MODE RELAY COMMAND	
TB1-A63	P09- 7	A 337R	+120 VDC PIP	
TB1-A63	J17-L5	CC206R	+120 VDC PIP	
TB1-A64	P09-107	A 397	BLOWER CURRENT SENSOR (TELEMETRY)	
TB1-A64	J17-F6	CC193	BLOWER CURRENT SENSOR (TELEMETRY)	
TB1-A65	P05- 10	A 216Y	TRACKER Y REFERENCE	
TB1-A65	P13- 27	A 498Y	TRACKER Y REFERENCE	
TB1-A66	P05- 11	A 216R	TRACKER Y REFERENCE	
TB1-A66	P13- 28	A 498R	TRACKER Y REFERENCE	
TB1-A67	SHLD A 216	A 216B	0 VDC OPTICS	
TB1-A67	SHLD A 498	A 498B	0 VDC OPTICS	
TB1-A67	TB1-B47	AA 6	0 VDC OPTICS	
TB1-A67	TB1-B67	TB 34	0 VDC OPTICS	
TB1-A68	J09- 47	A 308Y	AGC COMMON (OSS)	
TB1-A68	J24- 84	A 564Y	AGC COMMON (OSS)	101
TB1-A68	J24- 83	A 566Y	SXT POWER ON INDICATION	105
TB1-A69	J09- 48	A 308R	OPTICS ZERO ENCODER INDICATION	
TB1-A69	P10- 43	A 416Y	OPTICS ZERO ENCODER INDICATION	
TB1-A69	J24- 15	A 564R	OPTICS ZERO ENCODER INDICATION	104
TB1-A70	SHLD A 308	A 308B	AGC SIGNAL 178 SHIELD RETURN	
TB1-A70	SHLD A 416	A 416B	AGC SIGNAL 178 SHIELD RETURN	
TB1-A70	SHLD A 564	A 564B	AGC SIGNAL 178 SHIELD RETURN	
TB1-A71	J09- 45	A 306G	800 CPS 28 V 1 PCT HI OPTICS TRACKER PWR	
TB1-A71	J20-H4	CC273L	800 CPS 28 V 1 PCT HI OPTICS TRACKER PWR	
TB1-A72	TB1-A73	TB 40	800 CPS 28 V 1 PCT HI OPTICS	
TB1-A72	J09- 80	A 306R	800 CPS 28 V 1 PCT HI OPTICS	

MANNED SPACECRAFT CENTER HOUSTON, TEXAS	SIZE A	1023058		
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(CONT.)

FROM	TO	COND NO	CIRCUIT FUNCTION
TB1-A72	P09-125	A 402R	800 CPS 28 V 1 PCT HI OPTICS
TB1-A72	J16-P5	CC172W	800 CPS 28 V 1 PCT HI OPTICS
TB1-A73	P08- 27	A 274R	800 CPS 28 V 1 PCT HI OPTICS
TB1-A73	P08- 30	A 275R	800 CPS 28 V 1 PCT HI OPTICS
TB1-A73	J20-G6	CC273W	800 CPS 28 V 1 PCT HI OPTICS
TB1-A73	TB1-A72	TB 40	800 CPS 28 V 1 PCT HI OPTICS
TB1-A74	P08- 21	A 272R	800 CPS 28 V 5 PCT L-90 DEG HI OPTICS
TB1-A74	P08- 24	A 273R	800 CPS 28 V 5 PCT L-90 DEG HI OPTICS
TB1-A74	P09-103	A 394R	800 CPS 28 V 5 PCT L-90 DEG HI OPTICS
TB1-A74	J16-P6	CC174R	800 CPS 28 V 5 PCT L-90 DEG HI OPTICS
TB1-A75	J08- 95	A 165N	400 CPS 26 V LO
TB1-A75	P10- 49	A 418R	400 CPS 26 V LO
TB1-A76	J08- 66	A 165G	MDV SLEW CONTROL 1.5 V 400 CPS
TB1-A76	J09- 66	A 315G	MDV SLEW CONTROL 1.5 V 400 CPS
TB1-A77	J08- 68	A 165R	400 CPS 26 V MDV RSVR EXC
TB1-A77	J09- 68	A 315R	400 CPS 26 V MDV RSVR EXC
TB1-A78	J08- 81	A 165Y	400 CPS 26 V SLEW
TB1-A78	J09- 81	A 315Y	400 CPS 26 V SLEW
TB1-B 1	TB1-B 2	TB 2	400 CPS 6 V LO
TB1-B 1	J01- 29	A 8Y	400 CPS 6 V LO
TB1-B 1	J02- 29	A 28Y	400 CPS 6 V LO
TB1-B 1	J03- 29	A 48Y	400 CPS 6 V LO
TB1-B 2	TB1-B 3	TB 2	400 CPS 6 V LO
TB1-B 2	J04- 29	A 67Y	400 CPS 6 V LO
TB1-B 2	J05- 29	A 85Y	400 CPS 6 V LO
TB1-B 2	P10- 93	A 420R	400 CPS 6 V LO
TB1-B 2	TB1-B 1	TB 2	400 CPS 6 V LO
TB1-B 3	TB1-B 4	TB 2	400 CPS 6 V LO
TB1-B 3	J06-107	A 123Y	400 CPS 6 V LO
TB1-B 3	P05- 44	A 225Y	400 CPS 6 V LO
TB1-B 3	TB1-B 2	TB 2	400 CPS 6 V LO
TB1-B 4	TB1-D 3	AA 7	0 VDC IMU

MANNED SPACECRAFT CENTER HOUSTON, TEXAS	SIZE A	1023058	
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(CONT.)

FROM	TO	COND NO	CIRCUIT FUNCTION
TB1-B 4	P08- 54	A 282Y	400 CPS 6 V LO
TB1-B 4	P08- 57	A 283Y	400 CPS 6 V LO
TB1-B 4	P10- 94	A 420Y	400 CPS 6 V LO
TB1-B 4	TB1-B 3	TB 2	400 CPS 6 V LO
TB1-B 5	P02-B	A 178Y	IMU RSVR EXC 800 CPS 28 V 1 PCT LO IMU
TB1-B 5	J16-P4	CC160W	IMU RSVR EXC 800 CPS 28 V 1 PCT LO IMU
TB1-B 6	J01- 12	A 5Y	ZEROING RSVR 800 CPS
TB1-B 6	J02- 12	A 25Y	ZEROING RSVR 800 CPS
TB1-B 6	J03- 12	A 45Y	ZEROING RSVR 800 CPS
TB1-B 6	J16-R4	CC160K	ZEROING RSVR 800 CPS
TB1-B 7	TB1-B 8	TB 12	800 CPS 28 V 1 PCT LO IMU
TB1-B 7	P01- 10	A 126Y	800 CPS 28 V 1 PCT LO IMU
TB1-B 7	P09- 12	A 340Y	800 CPS 28 V 1 PCT LO IMU
TB1-B 7	J16-S3	CC160R	800 CPS 28 V 1 PCT LO IMU
TB1-B 8	J01- 14	A 1Y	800 CPS 28 V 1 PCT LO IMU
TB1-B 8	J02- 14	A 21Y	800 CPS 28 V 1 PCT LO IMU
TB1-B 8	J03- 14	A 41Y	800 CPS 28 V 1 PCT LO IMU
TB1-B 8	TB1-B 7	TB 12	800 CPS 28 V 1 PCT LO IMU
TB1-B10	P07-J*	A 261Y	0 VDC IMU
TB1-B10	J11-G2	CC 65W	0 VDC IMU
TB1-B11	P07-H*	A 261R	IG ADA
TB1-B11	J11-F1	CC 65R	IG ADA
TB1-B12	SHLD A 23	A 23B	0 VDC IMU
TB1-B12	SHLD A 185	A 185B	0 VDC IMU
TB1-B12	SHLD A 347	A 347B	0 VDC IMU
TB1-B12	SHLD CC328	CC328B	0 VDC IMU
TB1-B12	TB1-C12	TB 14	0 VDC IMU
TB1-B12	TB1-A12	TB 14	0 VDC IMU
TB1-B13	J02- 20	A 23R	COS AMG 1X S3
TB1-B13	P02-L	A 185R	COS AMG 1X S3
TB1-B13	P09- 25	A 347R	COS AMG 1X S3
TB1-B13	J22- 16	CC328W	COS AMG 1X S3

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FROM	TO	COND NO	CIRCUIT FUNCTION
TB1-B14	J02- 6	A 23Y	COS AMG 1X S1
TB1-B14	P02-M	A 185Y	COS AMG 1X S1
TB1-B14	P09- 44	A 347Y	COS AMG 1X S1
TB1-B14	J22- 32	CC328R	COS AMG 1X S1
TB1-B15	J02- 21	A 24R	SIN AMG 1X RET
TB1-B15	P02-N	A 186Y	SIN AMG 1X RET S2
TB1-B15	P09- 42	A 346R	SIN AMG 1X RET
TB1-B15	J22- 15	CC327W	SIN AMG 1X RET
TB1-B16	J02- 7	A 24Y	SIN AMG 1X
TB1-B16	P02-P	A 186R	SIN AMG 1X S4
TB1-B16	P09- 24	A 346Y	SIN AMG 1X
TB1-B16	J22- 14	CC327R	SIN AMG 1X
TB1-B17	SHLD A 24	A 24B	0 VDC IMU
TB1-B17	SHLD A 186	A 186B	0 VDC IMU
TB1-B17	SHLD A 346	A 346B	0 VDC IMU
TB1-B17	SHLD CC327	CC327B	0 VDC IMU
TB1-B17	TB1-C17	TB 15	0 VDC IMU
TB1-B17	TB1-A12	AA 1	0 VDC IMU
TB1-B17	TB1-A17	TB 15	0 VDC IMU
TB1-B18	J05- 12	A 84Y	TRUNNION CDU 1/2X RSVR P2
TB1-B18	J19-P2	CC252W	TRUNNION CDU 1/2X RSVR P2
TB1-B19	J05- 11	A 84G	TRUNNION CDU 1/2X RSVR P1 AND P3
TB1-B19	J05- 25	A 84R	TRUNNION CDU 1/2X RSVR P3
TB1-B19	J19-P1	CC252R	TRUNNION CDU 1/2X RSVR P3
TB1-B21	TB1-B22	TB 17	CONDITION LAMPS COMMON
TB1-B21	J08- 17	A 146	SPARE FAIL LIGHT 3 LO
TB1-B21	J08- 19	A 148	GIMBAL LOCK LIGHT LO
TB1-B21	J08- 28	A 149	SPARE FAIL LIGHT 2 LO
TB1-B22	TB1-B23	TB 17	CONDITION LAMPS COMMON
TB1-B22	J08- 30	A 151	ZERO ENCODER LIGHT LO
TB1-B22	J08- 61	A 163	IMU FAIL LIGHT LO
TB1-B22	J08- 70	A 167	SPARE FAIL LIGHT 1 LO

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(CONT.)

FROM	TO	COND NO	CIRCUIT FUNCTION	
TB1-B22	TB1-B21	TB 17	CONDITION LAMPS COMMON	
TB1-B23	J08- 83	A 173	CDU FAIL LIGHT LO	
TB1-B23	J08- 84	A 174	ACCEL FAIL LIGHT LO	
TB1-B23	J09- 99	A 292	CONDITION LAMPS COMMON	
TB1-B23	TB1-B22	TB 17	CONDITION LAMPS COMMON	
TB1-B24	J08- 73	A 170	ACCEL FAIL LIGHT HI	
TB1-B24	J10- 5	A 473Y	ACCEL FAIL LIGHT HI	303
TB1-B25	J08- 63	A 164Y	IMU TEMP CONT FAIL LIGHT LO	
TB1-B25	J09- 38	A 591	IMU TEMP CONT FAIL LIGHT LO	
TB1-B26	J08- 62	A 164R	IMU TEMP CONT FAIL LIGHT HI	
TB1-B26	P09- 86	A 386	IMU TEMP CONT FAIL LIGHT HI	
TB1-B26	J17-P5	CC197	IMU TEMP CONT FAIL LIGHT HI	
TB1-B28	P03-W	A 195N	IMU MG ERROR SIG	
TB1-B28	P09-112	A 390R	IMU MG ERROR SIG	
TB1-B28	J11-A5	CC 68R	IMU MG ERROR SIG	
TB1-B29	J03- 57	A 55Y	OG CDU 1/2X ERROR SIG LO	
TB1-B29	J16-F5	CC145R	OG CDU 1/2X ERROR SIG LO	
TB1-B30	J02- 57	A 35Y	MG CDU 1/2X ERROR SIG LO	
TB1-B30	J16-F3	CC138R	MG CDU 1/2X ERROR SIG LO	
TB1-B31	J01- 57	A 15Y	IG CDU 1/2X ERROR SIG LO	
TB1-B31	J16-F1	CC133R	IG CDU 1/2X ERROR SIG LO	
TB1-B33	J05-108	A 95R	TRUNNION CDU ENCODER PHASE 2	
TB1-B33	J17-A8	CC202R	TRUNNION CDU ENCODER PHASE 2	
TB1-B34	SHLD A 95	A 95B	TRUNNION CDU ENCODER COMMON	
TB1-B34	J05- 94	A 95Y	TRUNNION CDU ENCODER COMMON	
TB1-B34	J17-A7	CC202W	TRUNNION CDU ENCODER COMMON	
TB1-B35	J05-107	A 95G	TRUNNION CDU ENCODER PHASE 1	
TB1-B35	J17-A6	CC202L	TRUNNION CDU ENCODER PHASE 1	
TB1-B36	TB1-C36	TB 23	0 VDC OPTICS	
TB1-B36	TB1-A39	AA 3	0 VDC OPTICS	
TB1-B36	TB1-A36	TB 23	0 VDC OPTICS	
TB1-B39	TB1-C39	TB 24	0 VDC OPTICS	

(CONT.)

FROM	TO	COND NO	CIRCUIT FUNCTION	
TB1-B39	TB1-A42	AA 4	0 VDC OPTICS	
TB1-B39	TB1-A39	TB 24	0 VDC OPTICS	
TB1-B40	P09- 95	A 391G	X PIP ERROR MONITOR	
TB1-B40	J13-D2	CC 97	X PIP ERROR MONITOR	
TB1-B41	P09-114	A 391N	0 VDC IMU	
TB1-B41	J12-B5	CC 89	0 VDC IMU	
TB1-B42	SHLD A 92	A 92B	0 VDC OPTICS	
TB1-B42	SHLD A 240	A 240B	0 VDC OPTICS	
TB1-B42	SHLD CC234	CC234B	0 VDC OPTICS	
TB1-B42	TB1-C42	TB 25	0 VDC OPTICS	
TB1-B42	TB1-A47	AA 5	0 VDC OPTICS	
TB1-B42	TB1-A42	TB 25	0 VDC OPTICS	
TB1-B43	J05-101	A 92R	TRUNNION CDU 16X RSVR P4	
TB1-B43	P05- 91	A 240R	SXT TRUNNION 64X RSVR S2	
TB1-B43	J18-C1	CC234R	SXT TRUNNION 64X RSVR S2	
TB1-B44	J05- 87	A 92Y	TRUNNION CDU 16X RSVR P2	
TB1-B44	P05- 90	A 240Y	SXT TRUNNION 64X RSVR S4	
TB1-B44	J18-C2	CC234W	SXT TRUNNION 64X RSVR S4	
TB1-B45	J04- 87	A 75R	SHAFT CDU 16X RSVR P2	
TB1-B45	P05- 79	A 234R	SXT SHAFT 16X RSVR S2	
TB1-B45	J18-A3	CC219R	SXT SHAFT 16X RSVR S2	
TB1-B46	J04-101	A 75Y	SHAFT CDU 16X RSVR P4	
TB1-B46	P05- 78	A 234Y	SXT SHAFT 16X RSVR S4	
TB1-B46	J18-A2	CC219W	SXT SHAFT 16X RSVR S4	
TB1-B47	SHLD A 75	A 75B	0 VDC OPTICS	
TB1-B47	SHLD A 234	A 234B	0 VDC OPTICS	
TB1-B47	SHLD CC219	CC219B	0 VDC OPTICS	
TB1-B47	TB1-C47	TB 26	0 VDC OPTICS	
TB1-B47	TB1-A67	AA 6	0 VDC OPTICS	
TB1-B47	TB1-A47	TB 26	0 VDC OPTICS	
TB1-B48	J06- 81	A 99R	ATTIT CONT MODE COMMAND FROM AGC	
TB1-B48	J10- 12	A 474G	ATTIT CONT MODE COMMAND FROM AGC	314

(CONT.)

FROM	TO	COND NO	CIRCUIT FUNCTION	
TB1-B49	SHLD A 130	A 130B	STRUCTURE GROUND	
TB1-B49	SHLD A 475	A 475B	STRUCTURE GROUND	
TB1-B49	SHLD A 476	A 476B	STRUCTURE GROUND	
TB1-B49	J15-K3	CC132	STRUCTURE GROUND	
TB1-B49	TB1-A49	TB 27	STRUCTURE GROUND	
TB1-B50	P01- 13	A 127R	FINE ALIGN MODE COMMAND FROM AGC	
TB1-B50	J10- 24	A 475R	FINE ALIGN MODE COMMAND FROM AGC	310
TB1-B51	J08-106	A 177	STEP-UP-R	
TB1-B51	J09-106	A 330	STEP-UP-R	
TB1-B52	J08- 78	A 171	STEP-UP-C	
TB1-B52	J09- 78	A 322	STEP-UP-C	
TB1-B53	J01- 15	A 6	+28 VDC CDU NOT LOCK	
TB1-B53	J02- 15	A 26	+28 VDC CDU NOT LOCK	
TB1-B53	J03- 15	A 46	+28 VDC CDU NOT LOCK	
TB1-B53	J15-R6	CC129	+28 VDC CDU NOT LOCK	
TB1-B56	J10- 9	A 481	AGC FAIL SIG	326
TB1-B56	J12-M3	CC 84	AGC FAIL SIG	
TB1-B57	J09- 58	A 313Y	0 DEG OFFSET RELAY COMMAND	
TB1-B57	J18-P2	CC223W	0 DEG OFFSET RELAY COMMAND	
TB1-B58	J09- 59	A 313R	25 DEG OFFSET RELAY COMMAND	
TB1-B58	J18-R2	CC223R	25 DEG OFFSET RELAY COMMAND	
TB1-B59	J09- 70	A 286G	COMPUTER RELAY COMMAND	
TB1-B59	J10- 67	A 472G	COMPUTER RELAY COMMAND	331
TB1-B59	J18-P3	CC225W	COMPUTER RELAY COMMAND	
TB1-B60	J09- 72	A 286Y	ZERO OPTICS MODE COMMAND	
TB1-B60	J10- 65	A 472Y	ZERO OPTICS MODE COMMAND	316
TB1-B60	J18-P1	CC225R	ZERO OPTICS MODE COMMAND	
TB1-B61	P10- 15	A 413Y	AUTOMATIC MARK COMMAND	
TB1-B61	J20-F2	CC276W	AUTOMATIC MARK COMMAND	
TB1-B62	TB1-D 4	AA 8	0 VDC IMU	
TB1-B62	TB1-C62	TB 33	0 VDC IMU	
TB1-B62	P09- 48	A 358	0 VDC IMU	

(CONT.)

FROM	TO	COND NO	CIRCUIT FUNCTION
TB1-B62	P09- 68	A 372	0 VDC IMU
TB1-B63	P09- 29	A 337Y	+32, +120 VDC RET PIP
TB1-B63	J17-L4	CC206W	+32, +120 VDC RET PIP
TB1-B64	P09-129	A 405	HTR CURRENT (TELEMETRY)
TB1-B64	J17-F3	CC196	HTR CURRENT (TELEMETRY)
TB1-B65	P05- 18	A 218Y	TRACKER X REFERENCE
TB1-B65	P13- 36	A 499Y	TRACKER X REFERENCE
TB1-B66	P05- 17	A 218R	TRACKER X REFERENCE
TB1-B66	P13- 35	A 499R	TRACKER X REFERENCE
TB1-B67	SHLD A 218	A 218B	0 VDC OPTICS
TB1-B67	SHLD A 499	A 499B	0 VDC OPTICS
TB1-B67	TB1-D76	AA 9	0 VDC OPTICS
TB1-B67	TB1-C67	TB 34	0 VDC OPTICS
TB1-B67	P05- 9	A 215	0 VDC OPTICS
TB1-B67	TB1-A67	TB 34	0 VDC OPTICS
TB1-B68	TB1-C68	A 573	0 VDC IMU
TB1-B68	TB1-C62	AA 10	0 VDC IMU
TB1-B68	TB1-B69	TB 35	0 VDC IMU
TB1-B68	P11-D	A 512	0 VDC IMU
TB1-B68	J11-R3	CC 75	0 VDC IMU
TB1-B69	TB1-B70	TB 35	0 VDC IMU
TB1-B69	P12-E	A 542	0 VDC IMU
TB1-B69	J17-S3	CC211	0 VDC IMU
TB1-B69	TB1-B68	TB 35	0 VDC IMU
TB1-B70	TB1-D73	A 578	0 VDC IMU
TB1-B70	TB1-K20	AA 11	0 VDC IMU
TB1-B70	P11-F	A 516	0 VDC IMU
TB1-B70	J17-S4	CC212	0 VDC IMU
TB1-B70	TB1-B69	TB 35	0 VDC IMU
TB1-B71	P05- 68	A 229	+28 VDC OPTICS TRACKER POWER
TB1-B71	J09- 96	A 328	+28 VDC OPTICS TRACKER POWER
TB1-B71	P13- 38	A 594R	+28 VDC OPTICS TRACKER POWER

(CONT.)

FROM	TO	COND NO	CIRCUIT FUNCTION
TB1-B71	J20-N4	CC280	+28 VDC OPTICS TRACKER POWER
TB1-B72	TB1-B73	TB 41	800 CPS 28 V 1 PCT LO OPTICS
TB1-B72	J09- 69	A 306Y	800 CPS 28 V 1 PCT LO OPTICS
TB1-B72	P09-124	A 402Y	800 CPS 28 V 1 PCT LO OPTICS
TB1-B72	J16-N5	CC172R	800 CPS 28 V 1 PCT LO OPTICS
TB1-B73	P08- 28	A 274Y	800 CPS 28 V 1 PCT LO OPTICS
TB1-B73	P08- 31	A 275Y	800 CPS 28 V 1 PCT LO OPTICS
TB1-B73	J20-G5	CC273R	800 CPS 28 V 1 PCT LO OPTICS
TB1-B73	TB1-B72	TB 41	800 CPS 28 V 1 PCT LO OPTICS
TB1-B74	P08- 22	A 272Y	800 CPS 28 V 5 PCT L-90 DEG LO OPTICS
TB1-B74	P08- 25	A 273Y	800 CPS 28 V 5 PCT L-90 DEG LO OPTICS
TB1-B74	P09-102	A 394Y	800 CPS 28 V 5 PCT L-90 DEG LO OPTICS
TB1-B74	J16-N6	CC174W	800 CPS 28 V 5 PCT L-90 DEG LO OPTICS
TB1-B75	J08- 36	A 154Y	400 CPS 6 V LO
TB1-B75	P10- 95	A 418Y	400 CPS 6 V LO
TB1-B76	J08- 55	A 154R	PROJECTION LAMP HI INTENSITY
TB1-B76	J09- 55	A 307R	PROJECTION LAMP HI INTENSITY
TB1-B77	J08- 46	A 154G	PROJECTION LAMP LO INTENSITY
TB1-B77	J09- 46	A 307Y	PROJECTION LAMP LO INTENSITY
TB1-B78	P10- 69	A 419R	400 CPS 115 V HI
TB1-B78	P11-N	A 526R	400 CPS 115 V HI
TB1-B78	J20-N3	CC311R	400 CPS 115 V HI
TB1-C 1	TB1-C 2	TB 3	400 CPS 6 V HI
TB1-C 1	P01-106	A 143G	400 CPS 6 V HI
TB1-C 1	P10-107	A 420G	400 CPS 6 V HI
TB1-C 2	P01- 90	A 143N	400 CPS 6 V HI
TB1-C 2	P10-108	A 420N	400 CPS 6 V HI
TB1-C 2	TB1-C 1	TB 3	400 CPS 6 V HI
TB1-C 3	P01- 91	A 144	MODE LAMP TEST PWR
TB1-C 3	J09- 84	A 312Y	MODE LAMP TEST PWR
TB1-C 4	J08- 32	A 153	MASTER CAUTION LIGHT HI
TB1-C 4	J08- 54	A 161	MASTER WARNING LIGHT HI

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FROM	TO	COND NO	CIRCUIT FUNCTION
TB1-C 4	J22- 41	CC326	+28 VDC SPACECRAFT
TB1-C10	P07-C#	A 259Y	Z PIP ERROR LO
TB1-C10	J14-A2	CC105W	Z PIP ERROR LO
TB1-C11	P07-B#	A 259R	Z PIP ERROR HI
TB1-C11	J14-A1	CC105R	Z PIP ERROR HI
TB1-C12	TB1-D12	TB 14	0 VDC IMU
TB1-C12	TB1-B12	TB 14	0 VDC IMU
TB1-C14	P03-D	A 196R	COS AOG 1X S3
TB1-C14	P09- 45	A 348R	COS AOG 1X S3
TB1-C14	J16-B8	CC143W	COS AOG 1X S3
TB1-C15	J03- 6	A 43Y	COS AOG 1X S1
TB1-C15	P03-E	A 196Y	COS AOG 1X S1
TB1-C15	P09- 27	A 348Y	COS AOG 1X S1
TB1-C15	J16-C8	CC143R	COS AOG 1X S1
TB1-C16	J03- 20	A 43R	COS AOG 1X TO CDU
TB1-C16	J16-C9	CC143L	COS AOG 1X TO CDU
TB1-C17	SHLD A 43	A 43B	0 VDC IMU
TB1-C17	SHLD A 196	A 196B	0 VDC IMU
TB1-C17	SHLD A 348	A 348B	0 VDC IMU
TB1-C17	SHLD CC143	CC143B	0 VDC IMU
TB1-C17	TB1-D17	TB 15	0 VDC IMU
TB1-C17	TB1-B17	TB 15	0 VDC IMU
TB1-C18	P03-Y	A 206R	OG TORQUE MOTOR HI
TB1-C18	P06-H	A 250R	OG TORQUE MOTOR HI
TB1-C18	P09-131	A 398R	OG TORQUE MOTOR HI
TB1-C18	J11-H6	CC 71R	OG TORQUE MOTOR HI
TB1-C19	P03-X	A 206Y	OG TORQUE MOTOR RET
TB1-C19	P06-J	A 250Y	OG TORQUE MOTOR RET
TB1-C19	P09-109	A 398Y	OG TORQUE MOTOR RET
TB1-C19	J11-H5	CC 71W	OG TORQUE MOTOR RET
TB1-C21	P07-C	A 257R	Z GYRO TORQUE -
TB1-C21	J14-M6	CC109R	Z GYRO TORQUE -

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FROM	TO	COND NO	CIRCUIT FUNCTION
TB1-C22	P07-B	A 257W	Z GYRO TORQUE RET
TB1-C22	J14-N6	CC109W	Z GYRO TORQUE RET
TB1-C23	P07-A	A 257L	Z GYRO TORQUE +
TB1-C23	J14-L6	CC109L	Z GYRO TORQUE +
TB1-C24	SHLD A 257	A 257B	0 VDC IMU
TB1-C24	SHLD CC109	CC109B	0 VDC IMU
TB1-C24	TB1-D24	TB 18	0 VDC IMU
TB1-C24	TB1-A17	AA 2	0 VDC IMU
TB1-C25	J08- 52	A 159R	G+N ERROR LIGHT LO
TB1-C25	J09- 62	A 590	G+N ERROR LIGHT LO
TB1-C26	J08- 51	A 159Y	G+N ERROR LIGHT HI
TB1-C26	P09- 84	A 384	G+N ERROR LIGHT HI
TB1-C26	J12-L2	CC 86	G+N ERROR LIGHT HI
TB1-C28	P03-U	A 195G	IMU IG AND Y GYRO ERROR SIG
TB1-C28	P09- 94	A 390G	IMU IG AND Y GYRO ERROR SIG
TB1-C28	J11-B6	CC 68W	IMU IG AND Y GYRO ERROR SIG
TB1-C29	J03-106	A 60R	OG CDU MDA TACH SIG
TB1-C29	J16-A5	CC153R	OG CDU MDA TACH SIG
TB1-C30	SHLD A 60	A 60B	OG CDU MDA INPUT RET
TB1-C30	J03- 92	A 60Y	OG CDU MDA INPUT RET
TB1-C30	J16-B5	CC153L	OG CDU MDA INPUT RET
TB1-C31	J03-105	A 60G	OG CDU MDA SLEW SIG
TB1-C31	J16-A6	CC153W	OG CDU MDA SLEW SIG
TB1-C33	J03-108	A 61R	OG CDU ENCODER PHASE 2
TB1-C33	J15-C3	CC119R	OG CDU ENCODER PHASE 2
TB1-C34	SHLD A 61	A 61B	OG CDU ENCODER COMMON
TB1-C34	J03- 94	A 61Y	OG CDU ENCODER COMMON
TB1-C34	J15-D3	CC119W	OG CDU ENCODER COMMON
TB1-C35	J03-107	A 61G	OG CDU ENCODER PHASE 1
TB1-C35	J15-D4	CC119L	OG CDU ENCODER PHASE 1
TB1-C36	SHLD A 94	A 94B	0 VDC OPTICS
TB1-C36	SHLD CC258	CC258B	0 VDC OPTICS

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FROM	TO	COND NO	CIRCUIT FUNCTION
TB1-C36	TB1-D36	TB 23	0 VDC OPTICS
TB1-C36	TB1-B36	TB 23	0 VDC OPTICS
TB1-C37	J05-106	A 94R	TRUNNION CDU TACHOMETER HI
TB1-C37	J19-A6	CC258R	TRUNNION CDU TACHOMETER HI
TB1-C38	J05- 92	A 94Y	TRUNNION CDU TACHOMETER LO
TB1-C38	J19-B6	CC258W	TRUNNION CDU TACHOMETER LO
TB1-C39	TB1-D39	TB 24	0 VDC OPTICS
TB1-C39	TB1-B39	TB 24	0 VDC OPTICS
TB1-C40	J05-104	A 93Y	TRUNNION CDU 16X RSVR S2
TB1-C40	J19-B5	CC256W	TRUNNION CDU 16X RSVR S2
TB1-C41	J05- 90	A 93R	TRUNNION CDU 16X RSVR S3
TB1-C41	J19-B4	CC256R	TRUNNION CDU 16X RSVR S3
TB1-C42	SHLD A 83	A 83B	0 VDC OPTICS
TB1-C42	SHLD A 93	A 93B	0 VDC OPTICS
TB1-C42	SHLD A 224	A 224B	0 VDC OPTICS
TB1-C42	SHLD CC230	CC230B	0 VDC OPTICS
TB1-C42	SHLD CC256	CC256B	0 VDC OPTICS
TB1-C42	TB1-D42	TB 25	0 VDC OPTICS
TB1-C42	TB1-B42	TB 25	0 VDC OPTICS
TB1-C43	J05- 10	A 83Y	TRUNNION CDU 1/4X RSVR S4
TB1-C43	P05- 40	A 224Y	SXT TRUNNION 1X RSVR S2
TB1-C43	J18-D1	CC230W	TRUNNION CDU 1/4X RSVR S4
TB1-C44	J05- 9	A 83R	TRUNNION CDU 1/4X RSVR S2
TB1-C44	P05- 41	A 224R	SXT TRUNNION 1X RSVR S4
TB1-C44	J18-F1	CC230R	TRUNNION CDU 1/4X RSVR S2
TB1-C45	J04- 56	A 72R	SHAFT CDU 1/2X RSVR S2
TB1-C45	P05- 3	A 211R	SXT SHAFT 1/2X RSVR S2
TB1-C46	J04- 66	A 72Y	SHAFT CDU 1/2X RSVR S4
TB1-C46	P05- 2	A 211Y	SXT SHAFT 1/2X RSVR S4
TB1-C47	SHLD A 72	A 72B	0 VDC OPTICS
TB1-C47	SHLD A 211	A 211B	0 VDC OPTICS
TB1-C47	TB1-D47	TB 26	0 VDC OPTICS

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FROM	TO	COND NO	CIRCUIT FUNCTION	
TB1-C47	TB1-B47	TB 26	0 VDC OPTICS	
TB1-C48	P01- 27	A 130Y	CDU MANUAL MODE COMMAND FROM AGC	
TB1-C48	J10- 23	A 476Y	CDU MANUAL MODE COMMAND FROM AGC	309
TB1-C49	P01- 58	A 130R	ENTRY MODE COMMAND FROM AGC	
TB1-C49	J10- 25	A 476R	ENTRY MODE COMMAND FROM AGC	311
TB1-C50	P01- 38	A 127Y	ZERO ENCODER MODE COMMAND FROM AGC	
TB1-C50	J10- 21	A 475Y	ZERO ENCODER MODE COMMAND FROM AGC	307
TB1-C51	J03- 30	A 49	+28 VDC IMU FOR OG MDA	
TB1-C51	J16-T2	CC151	+28 VDC IMU FOR OG MDA	
TB1-C52	J02- 30	A 29	+28 VDC IMU FOR MG MDA	
TB1-C52	J16-T1	CC150	+28 VDC IMU FOR MG MDA	
TB1-C53	J01- 30	A 9	+28 VDC IMU FOR IG MDA	
TB1-C53	J16-S1	CC149	+28 VDC IMU FOR IG MDA	
TB1-C54	P06-F	A 247	-28 VDC	
TB1-C54	P09- 66	A 370	-28 VDC	
TB1-C54	J11-N6	CC 66	-28 VDC	
TB1-C56	J06- 68	A 113Y	AGC COMMON (ISS)	
TB1-C56	P01- 68	A 134Y	AGC COMMON (ISS)	
TB1-C56	J16-B7	CC173W	AGC COMMON (ISS)	
TB1-C56	J24- 26	CC332W	AGC COMMON (ISS)	165
TB1-C57	P09- 90	A 388N	MG CDU FAILURE INDICATION	
TB1-C57	J16-M3	CC175L	MG CDU FAILURE INDICATION	
TB1-C58	P09- 89	A 388G	IG CDU FAILURE INDICATION	
TB1-C58	J16-M2	CC175K	IG CDU FAILURE INDICATION	
TB1-C59	SHLD A 254	A 254B	0 VDC IMU	
TB1-C59	SHLD A 255	A 255B	0 VDC IMU	
TB1-C59	SHLD CC190	CC190B	0 VDC IMU	
TB1-C59	SHLD CC192	CC192B	0 VDC IMU	
TB1-C59	TB1-D59	TB 32	0 VDC IMU	
TB1-C60	P06-X	A 254R	IMU EMERGENCY HTR HI	
TB1-C60	J17-M4	CC190W	IMU EMERGENCY HTR HI	
TB1-C61	P06-R	A 254Y	EMERGENCY HTR LO-OPER AND STBY	

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FROM	TO	COND NO	CIRCUIT FUNCTION
TB1-C61	J17-N4	CC190R	EMERGENCY HTR LO-OPER AND STBY
TB1-C62	J09- 26	A 297	0 VDC IMU
TB1-C62	P10- 13	A 411	0 VDC IMU
TB1-C62	TB1-B68	AA 10	0 VDC IMU
TB1-C62	TB1-B62	TB 33	0 VDC IMU
TB1-C63	P09- 28	A 337G	+32 VDC PIP
TB1-C63	J17-T5	CC206L	+32 VDC PIP
TB1-C64	P09-128	A 404	TEMPERATURE CONTROL SIG LO
TB1-C64	J17-F2	CC205	TEMPERATURE CONTROL SIG LO
TB1-C65	P05- 73	A 232Y	TRACKER AUTOMATIC GAIN CONTROL LO
TB1-C65	P13- 9	A 490Y	TRACKER AUTOMATIC GAIN CONTROL LO
TB1-C66	P05- 72	A 232R	TRACKER AUTOMATIC GAIN CONTROL HI
TB1-C66	P13- 1	A 490R	TRACKER AUTOMATIC GAIN CONTROL HI
TB1-C67	SHLD A 232	A 232B	0 VDC OPTICS
TB1-C67	SHLD A 490	A 490B	0 VDC OPTICS
TB1-C67	TB1-D67	TB 34	0 VDC OPTICS
TB1-C67	P05- 37	A 222	0 VDC OPTICS
TB1-C67	TB1-B67	TB 34	0 VDC OPTICS
TB1-C68	TB1-C69	TB 36	0 VDC IMU
TB1-C68	P12-F	A 543	0 VDC IMU
TB1-C68	TB1-B68	A 573	0 VDC IMU
TB1-C68	J12-R4	CC 92	0 VDC IMU
TB1-C68	J20-K2	CC322	0 VDC IMU
TB1-C69	TB1-C70	TB 36	0 VDC IMU
TB1-C69	P11-E	A 513	0 VDC IMU
TB1-C69	J11-R1	CC 78	0 VDC IMU
TB1-C69	J12-R3	CC 91	0 VDC IMU
TB1-C69	TB1-C68	TB 36	0 VDC IMU
TB1-C70	TB1-F73	A 577	0 VDC IMU
TB1-C70	P12-D	A 539	0 VDC IMU
TB1-C70	J11-R2	CC 74	0 VDC IMU
TB1-C70	J12-R2	CC 90	0 VDC IMU

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FROM	TO	COND NO	CIRCUIT FUNCTION
TB1-C70	TB1-C69	TB 36	0 VDC IMU
TB1-C71	J09-108	A 331	+28 VDC OPTICS DAC POWER
TB1-C71	J18-T3	CC224	+28 VDC OPTICS DAC POWER
TB1-C72	P06-C	A 241R	800 CPS 28 V 5 PCT IMU WHEELS PHASE B
TB1-C72	P09- 33	A 349R	800 CPS 28 V 5 PCT IMU WHEELS PHASE B
TB1-C72	J12-P2	CC 81R	800 CPS 28 V 5 PCT IMU WHEELS PHASE B
TB1-C73	P06-B	A 241Y	800 CPS 28 V 5 PCT IMU WHEELS LO
TB1-C73	P09- 50	A 349Y	800 CPS 28 V 5 PCT IMU WHEELS LO
TB1-C73	J12-R1	CC 81W	800 CPS 28 V 5 PCT IMU WHEELS LO
TB1-C74	P06-A	A 241G	800 CPS 28 V 5 PCT IMU WHEELS PHASE A
TB1-C74	P09- 32	A 349G	800 CPS 28 V 5 PCT IMU WHEELS PHASE A
TB1-C74	J12-P1	CC 81L	800 CPS 28 V 5 PCT IMU WHEELS PHASE A
TB1-C75	P09- 13	A 341R	800 CPS 28 V 5 PCT L-90 DEG HI IMU
TB1-C75	J17-R4	CC183W	800 CPS 28 V 5 PCT L-90 DEG HI IMU
TB1-C75	J20-L6	CC285R	800 CPS 28 V 5 PCT L-90 DEG HI IMU
TB1-C76	P06-G*	A 248Y	800 CPS 28 V 5 PCT L-90 DEG LO IMU
TB1-C76	P09- 14	A 341Y	800 CPS 28 V 5 PCT L-90 DEG LO IMU
TB1-C76	J20-L5	CC285W	800 CPS 28 V 5 PCT L-90 DEG LO IMU
TB1-C77	P06-F*	A 248R	800 CPS 28 V 5 PCT HI TO BLOWERS
TB1-C77	J17-P4	CC183R	800 CPS 28 V 5 PCT HI TO BLOWERS
TB1-C78	P10- 68	A 419Y	400 CPS 115 V LO
TB1-C78	P11-K	A 526Y	400 CPS 115 V LO
TB1-C78	J20-M3	CC311W	400 CPS 115 V LO
TB1-D 1	J01- 3	A 2R	800 CPS 28 V 5 PCT L-90 DEG HI IMU
TB1-D 1	J02- 3	A 22R	800 CPS 28 V 5 PCT L-90 DEG HI IMU
TB1-D 1	J03- 3	A 42R	800 CPS 28 V 5 PCT L-90 DEG HI IMU
TB1-D 1	J12-H4	CC 88R	800 CPS 28 V 5 PCT L-90 DEG HI IMU
TB1-D 2	J01- 2	A 2Y	800 CPS 28 V 5 PCT L-90 DEG LO IMU
TB1-D 2	J02- 2	A 22Y	800 CPS 28 V 5 PCT L-90 DEG LO IMU
TB1-D 2	J03- 2	A 42Y	800 CPS 28 V 5 PCT L-90 DEG LO IMU
TB1-D 2	J12-K4	CC 88W	800 CPS 28 V 5 PCT L-90 DEG LO IMU
TB1-D 3	TB1-D 4	TB 6	0 VDC IMU

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FROM	TO	COND NO	CIRCUIT FUNCTION
TB1-D 3	J06- 78	A 115	0 VDC IMU
TB1-D 3	P01- 78	A 137	0 VDC IMU
TB1-D 3	TB1-B 4	AA 7	0 VDC IMU
TB1-D 4	J08- 92	A 175	0 VDC IMU
TB1-D 4	TB1-B62	AA 8	0 VDC IMU
TB1-D 4	TB1-D 3	TB 6	0 VDC IMU
TB1-D 5	TB1-D 6	TB 9	800 CPS 28 V 1 PCT HI OPTICS
TB1-D 5	J04- 1	A 62R	800 CPS 28 V 1 PCT HI OPTICS
TB1-D 5	J05- 1	A 79R	800 CPS 28 V 1 PCT HI OPTICS
TB1-D 5	J16-P5	CC161W	800 CPS 28 V 1 PCT HI OPTICS
TB1-D 6	TB1-D 7	TB 9	800 CPS 28 V 1 PCT HI OPTICS
TB1-D 6	P04- 3	A 208R	800 CPS 28 V 1 PCT HI OPTICS
TB1-D 6	P05- 12	A 217R	800 CPS 28 V 1 PCT HI OPTICS
TB1-D 6	TB1-D 5	TB 9	800 CPS 28 V 1 PCT HI OPTICS
TB1-D 7	P05- 32	A 220R	800 CPS 28 V 1 PCT HI OPTICS
TB1-D 7	P05- 71	A 231R	800 CPS 28 V 1 PCT HI OPTICS
TB1-D 7	P05- 84	A 237R	800 CPS 28 V 1 PCT HI OPTICS
TB1-D 7	TB1-D 6	TB 9	800 CPS 28 V 1 PCT HI OPTICS
TB1-D 8	J04- 5	A 63R	800 CPS 28 V 5 PCT L-90 DEG HI OPTICS
TB1-D 8	J05- 5	A 80R	800 CPS 28 V 5 PCT L-90 DEG HI OPTICS
TB1-D 8	P05- 76	A 233R	800 CPS 28 V 5 PCT L-90 DEG HI OPTICS
TB1-D 8	J16-P6	CC162R	800 CPS 28 V 5 PCT L-90 DEG HI OPTICS
TB1-D10	P07-A*	A 258Y	Y PIP ERROR LO
TB1-D10	J13-B3	CC 98W	Y PIP ERROR LO
TB1-D11	P07-Z	A 258R	Y PIP ERROR HI
TB1-D11	J13-A3	CC 98R	Y PIP ERROR HI
TB1-D12	TB1-F12	TB 14	0 VDC IMU
TB1-D12	TB1-C12	TB 14	0 VDC IMU
TB1-D14	P03-G	A 198Y	SIN AOG 1X S2
TB1-D14	P09- 26	A 334R	SIN AOG 1X S2
TB1-D14	J16-A8	CC144W	SIN AOG 1X S2
TB1-D15	J03- 7	A 44Y	SIN AOG 1X S4

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FROM	TO	COND NO	CIRCUIT FUNCTION
TB1-D15	P03-F	A 198R	SIN AOG 1X S4
TB1-D15	P09- 4	A 334Y	SIN AOG 1X S4
TB1-D15	J16-A9	CC144R	SIN AOG 1X S4
TB1-D16	J03- 21	A 44R	SIN AOG 1X TO CDU
TB1-D16	J16-B9	CC144L	SIN AOG 1X TO CDU
TB1-D17	SHLD A 44	A 44B	0 VDC IMU
TB1-D17	SHLD A 198	A 198B	0 VDC IMU
TB1-D17	SHLD A 334	A 334B	0 VDC IMU
TB1-D17	SHLD CC144	CC144B	0 VDC IMU
TB1-D17	TB1-F17	TB 15	0 VDC IMU
TB1-D17	TB1-C17	TB 15	0 VDC IMU
TB1-D18	P03-Z	A 192R	MG TORQUE MOTOR HI
TB1-D18	P03-C*	A 194R	MG TORQUE MOTOR HI
TB1-D18	P09-132	A 399R	MG TORQUE MOTOR HI
TB1-D18	J11-F6	CC 70R	MG TORQUE MOTOR HI
TB1-D19	P03-A*	A 192Y	MG TORQUE MOTOR RET
TB1-D19	P03-B*	A 194Y	MG TORQUE MOTOR RET
TB1-D19	P09-110	A 399Y	MG TORQUE MOTOR RET
TB1-D19	J11-G6	CC 70W	MG TORQUE MOTOR RET
TB1-D21	P07-J	A 262R	Y GYRO TORQUE -
TB1-D21	J14-M2	CC108R	Y GYRO TORQUE -
TB1-D22	P07-H	A 262W	Y GYRO TORQUE RET
TB1-D22	J14-M3	CC108W	Y GYRO TORQUE RET
TB1-D23	P07-G	A 262L	Y GYRO TORQUE +
TB1-D23	J14-M1	CC108L	Y GYRO TORQUE +
TB1-D24	SHLD A 262	A 262B	0 VDC IMU
TB1-D24	TB1-D59	A 567	0 VDC IMU
TB1-D24	SHLD CC108	CC108B	0 VDC IMU
TB1-D24	TB1-F24	TB 18	0 VDC IMU
TB1-D24	TB1-C24	TB 18	0 VDC IMU
TB1-D25	J08- 82	A 168Y	AGC POWER SUPPLY FAIL LIGHT LO
TB1-D25	J09- 39	A 592	AGC POWER SUPPLY FAIL LIGHT LO

(CONT.)

FROM	TO	COND NO	CIRCUIT FUNCTION
TB1-D26	J08- 71	A 168R	AGC POWER SUPPLY FAIL SIG HI
TB1-D26	P09- 67	A 371	AGC POWER SUPPLY FAIL SIG HI
TB1-D26	J12-M1	CC 85	AGC POWER SUPPLY FAIL SIG HI
TB1-D28	P03-V	A 195Y	IMU GIMBAL AND GYRO ERROR SIG LO
TB1-D28	P09- 93	A 390N	IMU GIMBAL AND GYRO ERROR SIG LO
TB1-D28	J11-B5	CC 68K	IMU GIMBAL AND GYRO ERROR SIG LO
TB1-D28	J15-B2	CC130R	IMU GIMBAL AND GYRO ERROR SIG LO
TB1-D29	J02-106	A 39R	MG CDU MDA TACH SIG
TB1-D29	J16-A3	CC141R	MG CDU MDA TACH SIG
TB1-D30	SHLD A 39	A 39B	MG CDU MDA INPUT RET
TB1-D30	J02- 92	A 39Y	MG CDU MDA INPUT RET
TB1-D30	J16-B3	CC141L	MG CDU MDA INPUT RET
TB1-D31	J02-105	A 39G	MG CDU MDA SLEW SIG
TB1-D31	J16-A4	CC141W	MG CDU MDA SLEW SIG
TB1-D33	J02-108	A 40R	MG CDU ENCODER PHASE 2
TB1-D33	J15-D2	CC118R	MG CDU ENCODER PHASE 2
TB1-D34	SHLD A 40	A 40B	MG CDU ENCODER COMMON
TB1-D34	J02- 94	A 40Y	MG CDU ENCODER COMMON
TB1-D34	J15-F2	CC118W	MG CDU ENCODER COMMON
TB1-D35	J02-107	A 40G	MG CDU ENCODER PHASE 1
TB1-D35	J15-F1	CC118L	MG CDU ENCODER PHASE 1
TB1-D36	SHLD A 221	A 221B	0 VDC OPTICS
TB1-D36	SHLD CC233	CC233B	0 VDC OPTICS
TB1-D36	TB1-F36	TB 23	0 VDC OPTICS
TB1-D36	TB1-C36	TB 23	0 VDC OPTICS
TB1-D37	P05- 34	A 221R	SXT TRUNNION TACH HI
TB1-D37	J18-A9	CC233R	SXT TRUNNION TACH HI
TB1-D38	P05- 35	A 221Y	SXT TRUNNION TACH LO
TB1-D38	J18-B9	CC233W	SXT TRUNNION TACH LO
TB1-D39	SHLD A 81	A 81B	0 VDC OPTICS
TB1-D39	SHLD CC255	CC255B	0 VDC OPTICS
TB1-D39	TB1-F39	TB 24	0 VDC OPTICS

(CONT.)

FROM	TO	COND NO	CIRCUIT FUNCTION
TB1-D39	TB1-C39	TB 24	0 VDC OPTICS
TB1-D40	J05- 17	A 81R	TRUNNION CDU 1/4X RSVR P2
TB1-D40	J19-C5	CC255R	TRUNNION CDU 1/4X RSVR P2
TB1-D41	J05- 4	A 81Y	TRUNNION CDU 1/4X RSVR P3
TB1-D41	J19-C6	CC255W	TRUNNION CDU 1/4X RSVR P3
TB1-D42	SHLD A 82	A 82B	0 VDC OPTICS
TB1-D42	SHLD A 223	A 223B	0 VDC OPTICS
TB1-D42	SHLD CC229	CC229B	0 VDC OPTICS
TB1-D42	TB1-F42	TB 25	0 VDC OPTICS
TB1-D42	TB1-C42	TB 25	0 VDC OPTICS
TB1-D43	J05- 22	A 82R	TRUNNION CDU 1/4X RSVR S3
TB1-D43	P05- 38	A 223R	SXT TRUNNION 1X RSVR S3
TB1-D43	J18-F3	CC229R	TRUNNION CDU 1/4X RSVR S3
TB1-D44	J05- 8	A 82Y	TRUNNION CDU 1/4X RSVR S1
TB1-D44	P05- 39	A 223Y	SXT TRUNNION 1X RSVR S1
TB1-D44	J18-F2	CC229W	TRUNNION CDU 1/4X RSVR S1
TB1-D45	J04- 57	A 73R	SHAFT CDU 1/2X RSVR S1
TB1-D45	P05- 6	A 213R	SXT SHAFT 1/2X RSVR S1
TB1-D45	J18-B1	CC218R	SXT SHAFT 1/2X RSVR S1
TB1-D46	J04- 67	A 73Y	SHAFT CDU 1/2X RSVR S3
TB1-D46	P05- 7	A 213Y	SXT SHAFT 1/2X RSVR S3
TB1-D46	J18-A1	CC218W	SXT SHAFT 1/2X RSVR S3
TB1-D47	SHLD A 73	A 73B	0 VDC OPTICS
TB1-D47	SHLD A 213	A 213B	0 VDC OPTICS
TB1-D47	SHLD CC218	CC218B	0 VDC OPTICS
TB1-D47	TB1-F47	TB 26	0 VDC OPTICS
TB1-D47	TB1-C47	TB 26	0 VDC OPTICS
TB1-D49	J04- 44	A 68N	CDU SHAFT MDA TUNING CAPACITOR
TB1-D49	J19-N2	CC268L	CDU SHAFT MDA TUNING CAPACITOR
TB1-D50	J05- 44	A 86N	CDU TRUNNION MDA TUNING CAPACITOR
TB1-D50	J19-N1	CC257L	CDU TRUNNION MDA TUNING CAPACITOR
TB1-D51	P09- 98	A 393	TRAY 3 THERMISTER HI

(CONT.)

FROM	TO	COND NO	CIRCUIT FUNCTION
TB1-D51	J13-C1	CC104	TRAY 3 THERMISTER HI
TB1-D52	P09- 80	A 382	TRAY 4 THERMISTER HI
TB1-D52	J14-B1	CC111	TRAY 4 THERMISTER HI
TB1-D56	SHLD A 113	A 113B	AGC SIGNAL 178 SHIELD RETURN
TB1-D56	SHLD A 134	A 134B	AGC SIGNAL 178 SHIELD RETURN
TB1-D56	SHLD CC173	CC173B	AGC SIGNAL 178 SHIELD RETURN
TB1-D56	SHLD CC332	CC332B	AGC SIGNAL 178 SHIELD RETURN
TB1-D57	P09-130	A 388R	OG CDU FAILURE INDICATION
TB1-D57	J16-N3	CC175R	OG CDU FAILURE INDICATION
TB1-D58	P09-108	A 388Y	0 VDC IMU
TB1-D58	J16-R2	CC175W	0 VDC IMU
TB1-D59	TB1-F74	AA 12	0 VDC IMU
TB1-D59	TB1-D24	A 567	0 VDC IMU
TB1-D59	J16-P2	CC176	0 VDC IMU
TB1-D59	TB1-C59	TB 32	0 VDC IMU
TB1-D60	P06-V	A 255R	IMU CONTROL HTR HI
TB1-D60	J17-P1	CC192R	IMU CONTROL HTR HI
TB1-D61	P06-W	A 255Y	IMU CONTROL HTR LO
TB1-D61	J17-N1	CC192W	IMU CONTROL HTR LO
TB1-D62	P06-Y	A 256	EMERG HTR CONT MODULE LO
TB1-D62	J09- 90	A 321R	EMERG HTR CONT MODULE LO
TB1-D63	J09- 76	A 321Y	IMU TEMP CONT K2 PIN 6
TB1-D63	J17-L1	CC189W	IMU TEMP CONT K2 PIN 6
TB1-D64	P09-127	A 403	IRIG TEMP (TELEMETRY)
TB1-D64	J17-F4	CC195	IRIG TEMP (TELEMETRY)
TB1-D65	P05- 65	A 228Y	TRACKER PREAMP OUTPUT LO
TB1-D65	P13- 10	A 491Y	TRACKER PREAMP OUTPUT LO
TB1-D66	P05- 64	A 228R	TRACKER PREAMP OUTPUT HI
TB1-D66	P13- 2	A 491R	TRACKER PREAMP OUTPUT HI
TB1-D67	SHLD A 228	A 228B	0 VDC OPTICS
TB1-D67	SHLD A 491	A 491B	0 VDC OPTICS
TB1-D67	TB1-F67	TB 34	0 VDC OPTICS

(CONT.)

FROM	TO	COND NO	CIRCUIT FUNCTION
TB1-D67	TB1-C67	TB 34	0 VDC OPTICS
TB1-D68	P06-D*	A 245R	IMU PRESSURE MONITOR HI
TB1-D68	P09- 79	A 381R	IMU PRESSURE MONITOR HI
TB1-D68	J20-A4	CC286R	IMU PRESSURE MONITOR HI
TB1-D69	P06-E*	A 245Y	IMU PRESSURE MONITOR LO
TB1-D69	P09- 78	A 381Y	IMU PRESSURE MONITOR LO
TB1-D69	J20-B4	CC286W	IMU PRESSURE MONITOR LO
TB1-D70	J09- 15	A 296	0 VDC SPACECRAFT
TB1-D70	P10- 9	A 408	0 VDC SPACECRAFT
TB1-D70	J17-M3	CC200	0 VDC SPACECRAFT
TB1-D71	TB1-D72	TB 38	CONDITION LAMP TEST
TB1-D71	P01- 88	A 141	CONDITION LAMP TEST
TB1-D71	J23- 48	A 562	CONDITION LAMP TEST
TB1-D71	J17-P6	CC181	CONDITION LAMP TEST
TB1-D72	J09- 73	A 318	CONDITION LAMP TEST
TB1-D72	P10- 10	A 409	CONDITION LAMP TEST
TB1-D72	J10- 2	A 477	CONDITION LAMP TEST
TB1-D72	TB1-D71	TB 38	CONDITION LAMP TEST
TB1-D73	TB1-F73	AA 13	0 VDC IMU
TB1-D73	TB1-G20	AA 14	0 VDC IMU
TB1-D73	TB1-D74	TB 42	0 VDC IMU
TB1-D73	P12-D	A 540	0 VDC IMU
TB1-D73	TB1-B70	A 578	0 VDC IMU
TB1-D74	TB1-H25	AA 15	0 VDC IMU
TB1-D74	TB1-D75	TB 42	0 VDC IMU
TB1-D74	P11-E	A 514	0 VDC IMU
TB1-D74	J17-S2	CC210	0 VDC IMU
TB1-D74	TB1-D73	TB 42	0 VDC IMU
TB1-D75	TB1-F75	A 583	0 VDC IMU
TB1-D75	TB1-K25	AA 16	0 VDC IMU
TB1-D75	P12-F	A 544	0 VDC IMU
TB1-D75	J17-S1	CC209	0 VDC IMU

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(CONT.)

FROM	TO	COND NO	CIRCUIT FUNCTION
TB1-D75	TB1-D74	TB 42	0 VDC IMU
TB1-D76	TB1-K67	A 586	0 VDC OPTICS
TB1-D76	TB1-D77	TB 44	0 VDC OPTICS
TB1-D76	P13- 30	A 594Y	0 VDC OPTICS
TB1-D76	TB1-B67	AA 9	0 VDC OPTICS
TB1-D76	J17-S6	CC213	0 VDC OPTICS
TB1-D77	TB1-F77	AA 17	0 VDC OPTICS
TB1-D77	TB1-D78	TB 44	0 VDC OPTICS
TB1-D77	P09- 5	A 335	0 VDC OPTICS
TB1-D77	J18-R6	CC240	0 VDC OPTICS
TB1-D77	TB1-D76	TB 44	0 VDC OPTICS
TB1-D78	P05- 69	A 230	0 VDC OPTICS
TB1-D78	P12-G	A 545	0 VDC OPTICS
TB1-D78	J19-R3	CC272	0 VDC OPTICS
TB1-D78	J20-P3	CC323	0 VDC OPTICS
TB1-D78	TB1-D77	TB 44	0 VDC OPTICS
TB1-F 5	TB1-F 6	TB 10	800 CPS 28 V 1 PCT LO OPTICS
TB1-F 5	J04- 14	A 62Y	800 CPS 28 V 1 PCT LO OPTICS
TB1-F 5	J05- 14	A 79Y	800 CPS 28 V 1 PCT LO OPTICS
TB1-F 5	J16-N5	CC161R	800 CPS 28 V 1 PCT LO OPTICS
TB1-F 6	TB1-F 7	TB 10	800 CPS 28 V 1 PCT LO OPTICS
TB1-F 6	P04- 4	A 208Y	800 CPS 28 V 1 PCT LO OPTICS
TB1-F 6	P05- 14	A 217G	800 CPS 28 V 1 PCT LO OPTICS
TB1-F 6	P05- 13	A 217Y	800 CPS 28 V 1 PCT LO OPTICS
TB1-F 6	TB1-F 5	TB 10	800 CPS 28 V 1 PCT LO OPTICS
TB1-F 7	P05- 55	A 220Y	800 CPS 28 V 1 PCT LO OPTICS
TB1-F 7	P05- 70	A 231Y	800 CPS 28 V 1 PCT LO OPTICS
TB1-F 7	P05- 85	A 237Y	800 CPS 28 V 1 PCT LO OPTICS
TB1-F 7	TB1-F 6	TB 10	800 CPS 28 V 1 PCT LO OPTICS
TB1-F 8	J04- 2	A 63Y	800 CPS 28 V 5 PCT L-90 DEG LO OPTICS
TB1-F 8	J05- 2	A 80Y	800 CPS 28 V 5 PCT L-90 DEG LO OPTICS
TB1-F 8	P05- 77	A 233Y	800 CPS 28 V 5 PCT L-90 DEG LO OPTICS

(CONT.)

FROM	TO	COND NO	CIRCUIT FUNCTION
TB1-F 8	J16-N6	CC162W	800 CPS 28 V 5 PCT L-90 DEG LO OPTICS
TB1-F10	P07-Y	A 266Y	X PIP ERROR LO
TB1-F10	J13-B1	CC 95W	X PIP ERROR LO
TB1-F11	P07-X	A 266R	X PIP ERROR HI
TB1-F11	J13-A1	CC 95R	X PIP ERROR HI
TB1-F12	SHLD A 205	A 205B	0 VDC IMU
TB1-F12	SHLD CC201	CC201B	0 VDC IMU
TB1-F12	TB1-G12	TB 14	0 VDC IMU
TB1-F12	TB1-D12	TB 14	0 VDC IMU
TB1-F13	P03-R	A 205R	PITCH-YAW RSVR S4
TB1-F13	J17-C2	CC201R	PITCH-YAW RSVR S4
TB1-F14	P02-D	A 180Y	COS AOG 16X S1
TB1-F14	J16-D7	CC148R	COS AOG 16X S1
TB1-F15	J03-100	A 56R	COS AOG 16X S3
TB1-F15	P02-C	A 180R	COS AOG 16X S3
TB1-F15	J16-F7	CC148W	COS AOG 16X S3
TB1-F16	J03- 86	A 56Y	COS AOG 16X TO CDU
TB1-F16	J16-F8	CC148L	COS AOG 16X TO CDU
TB1-F17	SHLD A 56	A 56B	0 VDC IMU
TB1-F17	SHLD A 180	A 180B	0 VDC IMU
TB1-F17	SHLD CC148	CC148B	0 VDC IMU
TB1-F17	TB1-G17	TB 15	0 VDC IMU
TB1-F17	TB1-D17	TB 15	0 VDC IMU
TB1-F18	P03-D*	A 197R	IG TORQUE MOTOR HI
TB1-F18	P03-G*	A 199R	IG TORQUE MOTOR HI
TB1-F18	P09- 92	A 389R	IG TORQUE MOTOR HI
TB1-F18	J11-D6	CC 69R	IG TORQUE MOTOR HI
TB1-F19	P03-E*	A 197Y	IG TORQUE MOTOR RET
TB1-F19	P03-F*	A 199Y	IG TORQUE MOTOR RET
TB1-F19	P09- 91	A 389Y	IG TORQUE MOTOR RET
TB1-F19	J11-D5	CC 69W	IG TORQUE MOTOR RET
TB1-F21	P07-F	A 260R	X GYRO TORQUE -

(CONT.)

FROM	TO	COND NO	CIRCUIT FUNCTION
TB1-F21	J13-G6	CC101R	X GYRO TORQUE -
TB1-F22	P07-E	A 260W	X GYRO TORQUE RET
TB1-F22	J13-F6	CC101W	X GYRO TORQUE RET
TB1-F23	P07-D	A 260L	X GYRO TORQUE +
TB1-F23	J13-D6	CC101L	X GYRO TORQUE +
TB1-F24	SHLD A 260	A 260B	0 VDC IMU
TB1-F24	SHLD CC101	CC101B	0 VDC IMU
TB1-F24	TB1-G24	TB 18	0 VDC IMU
TB1-F24	TB1-D24	TB 18	0 VDC IMU
TB1-F27	SHLD A 379	A 379B	0 VDC IMU
TB1-F27	SHLD A 380	A 380B	0 VDC IMU
TB1-F27	TB1-G27	TB 21	0 VDC IMU
TB1-F28	P03-B	A 193Y	Z GYRO ERROR SIG
TB1-F28	P09- 75	A 379Y	Z GYRO ERROR SIG
TB1-F28	J15-A1	CC130W	Z GYRO ERROR SIG
TB1-F29	J01-106	A 19R	IG CDU MDA TACH SIG
TB1-F29	J16-A1	CC136R	IG CDU MDA TACH SIG
TB1-F30	SHLD A 19	A 19B	IG CDU MDA INPUT RET
TB1-F30	J01- 92	A 19Y	IG CDU MDA INPUT RET
TB1-F30	J16-B1	CC136L	IG CDU MDA INPUT RET
TB1-F31	J01-105	A 19G	IG CDU MDA SLEW SIG
TB1-F31	J16-A2	CC136W	IG CDU MDA SLEW SIG
TB1-F32	SHLD A 59	A 59B	OG CDU ERROR SIG RET
TB1-F32	SHLD A 338	A 338B	OG CDU ERROR SIG RET
TB1-F32	TB1-G32	TB 22	OG CDU ERROR SIG RET
TB1-F32	TB1-G30	A 571	OG CDU ERROR SIG RET
TB1-F33	J01-108	A 20R	IG CDU ENCODER PHASE 2
TB1-F33	J15-D1	CC117R	IG CDU ENCODER PHASE 2
TB1-F34	SHLD A 20	A 20B	IG CDU ENCODER COMMON
TB1-F34	J01- 94	A 20Y	IG CDU ENCODER COMMON
TB1-F34	J15-C1	CC117W	IG CDU ENCODER COMMON
TB1-F35	J01-107	A 20G	IG CDU ENCODER PHASE 1

(CONT.)

FROM	TO	COND NO	CIRCUIT FUNCTION
TB1-F35	J15-C2	CC117L	IG CDU ENCODER PHASE 1
TB1-F36	SHLD A 276	A 276B	0 VDC OPTICS
TB1-F36	SHLD CC261	CC261B	0 VDC OPTICS
TB1-F36	TB1-G36	TB 23	0 VDC OPTICS
TB1-F36	TB1-D36	TB 23	0 VDC OPTICS
TB1-F37	P08- 33	A 276R	SCT TRUNNION TACH HI
TB1-F37	J19-A1	CC261R	SCT TRUNNION TACH HI
TB1-F38	P08- 34	A 276Y	SCT TRUNNION TACH LO
TB1-F38	J19-B1	CC261W	SCT TRUNNION TACH LO
TB1-F39	SHLD A 271	A 271B	0 VDC OPTICS
TB1-F39	SHLD CC259	CC259B	0 VDC OPTICS
TB1-F39	TB1-G39	TB 24	0 VDC OPTICS
TB1-F39	TB1-D39	TB 24	0 VDC OPTICS
TB1-F40	P08- 18	A 271Y	SCT TRUNNION 1X RSVR S2
TB1-F40	J19-C1	CC259W	SCT TRUNNION 1X RSVR S2
TB1-F41	P08- 19	A 271R	SCT TRUNNION 1X RSVR S4
TB1-F41	J19-C2	CC259R	SCT TRUNNION 1X RSVR S4
TB1-F42	SHLD A 269	A 269B	0 VDC OPTICS
TB1-F42	SHLD CC231	CC231B	0 VDC OPTICS
TB1-F42	TB1-G42	TB 25	0 VDC OPTICS
TB1-F42	TB1-D42	TB 25	0 VDC OPTICS
TB1-F43	P08- 10	A 269Y	SCT TRUNNION 1X RSVR P4
TB1-F43	J18-F5	CC231W	SCT TRUNNION 1X RSVR P4
TB1-F44	P08- 9	A 269R	SCT TRUNNION 1X RSVR P2
TB1-F44	J18-F4	CC231R	SCT TRUNNION 1X RSVR P2
TB1-F45	P05- 54	A 227Y	SXT SHAFT 1X RSVR S3
TB1-F45	P08- 45	A 280Y	SCT SHAFT 1X RSVR P1
TB1-F46	P05- 53	A 227R	SXT SHAFT 1X RSVR S1
TB1-F46	P08- 44	A 280R	SCT SHAFT 1X RSVR P3
TB1-F47	SHLD A 227	A 227B	0 VDC OPTICS
TB1-F47	SHLD A 280	A 280B	0 VDC OPTICS
TB1-F47	TB1-G47	TB 26	0 VDC OPTICS

(CONT.)

FROM	TO	COND NO	CIRCUIT FUNCTION
TB1-F47	TB1-D47	TB 26	0 VDC OPTICS
TB1-F48	J04- 35	A 69G	SHAFT CDU 1X RSVR S2
TB1-F48	J19-P3	CC264L	SHAFT CDU 1X RSVR S2
TB1-F49	J04- 45	A 69R	SHAFT CDU 1X RSVR S3
TB1-F49	J19-P4	CC264R	SHAFT CDU 1X RSVR S3
TB1-F50	J04- 34	A 69Y	SHAFT CDU 1X RSVR S1
TB1-F50	J19-P5	CC264W	SHAFT CDU 1X RSVR S1
TB1-F51	P09-116	A 401	TRAY 2 THERMISTER HI
TB1-F51	J12-C1	CC 87	TRAY 2 THERMISTER HI
TB1-F52	P09- 97	A 392	THERMISTER LO
TB1-F52	J14-B2	CC112	THERMISTER LO
TB1-F52	J23- 57	CC331	THERMISTER LO 199R
TB1-F56	TB1-F76	AA 18	0 VDC OPTICS
TB1-F56	TB1-F57	TB 30	0 VDC OPTICS
TB1-F56	P13- 13	A 493Y	TRACKER X DRIVE BUFFERED LO
TB1-F56	P13- 14	A 494Y	TRACKER Y DRIVE BUFFERED LO
TB1-F56	J19-L6	CC270	0 VDC OPTICS
TB1-F57	P09- 56	A 362	0 VDC OPTICS
TB1-F57	P13- 7	A 495Y	TRACKER PREAMP OUTPUT BUFFERED LO
TB1-F57	TB1-F56	TB 30	0 VDC OPTICS
TB1-F58	P09- 40	A 353	SCT TRUNNION TACH FEEDBACK BUFFERED
TB1-F58	J19-M6	CC246	SCT TRUNNION TACH FEEDBACK BUFFERED
TB1-F59	J09- 75	A 320	IMU TEMP ALARM AMP PIN 14
TB1-F59	J17-G1	CC188	IMU TEMP ALARM AMP PIN 14
TB1-F60	J09- 74	A 319R	IMU TEMP ALARM AMP PIN 15
TB1-F60	J17-G2	CC187R	IMU TEMP ALARM AMP PIN 15
TB1-F61	J09-105	A 319G	IMU TEMP ALARM BIAS RESISTOR
TB1-F61	J17-H1	CC187L	IMU TEMP ALARM BIAS RESISTOR
TB1-F62	J09- 92	A 319Y	IMU TEMP ALARM AMP PIN 5
TB1-F62	J17-H2	CC187W	IMU TEMP ALARM AMP PIN 5
TB1-F63	J09- 94	A 321G	TEMPERATURE CONTROLLER 0 VDC IMU
TB1-F63	J17-M1	CC189R	TEMPERATURE CONTROLLER 0 VDC IMU

(CONT.)

FROM	TO	COND NO	CIRCUIT FUNCTION
TB1-F64	P09-106	A 396	ACCEL TEMP (TELEMETRY)
TB1-F64	J17-F5	CC194	ACCEL TEMP (TELEMETRY)
TB1-F65	P13- 23	A 496Y	TRACKER Y ERROR LO
TB1-F65	J20-D7	CC275W	TRACKER Y ERROR LO
TB1-F66	P13- 31	A 496R	TRACKER Y ERROR HI
TB1-F66	J20-D6	CC275R	TRACKER Y ERROR HI
TB1-F67	SHLD A 302	A 302B	0 VDC OPTICS
TB1-F67	SHLD A 496	A 496B	0 VDC OPTICS
TB1-F67	TB1-G67	TB 34	0 VDC OPTICS
TB1-F67	TB1-D67	TB 34	0 VDC OPTICS
TB1-F68	J09- 34	A 302R	SCT TRUNNION TRACKER MODE INPUT HI
TB1-F68	J19-D3	CC262R	SCT TRUNNION TRACKER MODE INPUT HI
TB1-F69	J09- 35	A 302Y	SCT TRUNNION TRACKER MODE INPUT LO
TB1-F69	J19-D2	CC262W	SCT TRUNNION TRACKER MODE INPUT LO
TB1-F70	P09- 65	A 369R	+2.5 VDC CONDITIONING LO
TB1-F70	J20-F1	CC309W	+2.5 VDC CONDITIONING LO
TB1-F71	P09- 81	A 369Y	+2.5 VDC CONDITIONING HI
TB1-F71	J20-D1	CC309R	+2.5 VDC CONDITIONING HI
TB1-F72	P09- 83	A 383Y	0 VDC CONDITIONING
TB1-F72	J20-G1	CC294W	0 VDC CONDITIONING
TB1-F73	TB1-F74	TB 43	0 VDC IMU
TB1-F73	P11-F	A 515	0 VDC IMU
TB1-F73	TB1-C70	A 577	0 VDC IMU
TB1-F73	TB1-D73	AA 13	0 VDC IMU
TB1-F73	J20-K1	CC321	0 VDC IMU
TB1-F74	TB1-H24	AA 19	0 VDC IMU
TB1-F74	TB1-F75	TB 43	0 VDC IMU
TB1-F74	P12-E	A 541	0 VDC IMU
TB1-F74	TB1-D59	AA 12	0 VDC IMU
TB1-F74	TB1-F73	TB 43	0 VDC IMU
TB1-F75	P11-D	A 511	0 VDC IMU
TB1-F75	TB1-D75	A 583	0 VDC IMU

(CONT.)

FROM	TO	COND NO	CIRCUIT FUNCTION
TB1-F75	J16-R2	CC177	0 VDC IMU
TB1-F75	J20-H1	CC320	0 VDC IMU
TB1-F75	TB1-F74	TB 43	0 VDC IMU
TB1-F76	TB1-F77	TB 45	0 VDC OPTICS
TB1-F76	J09- 83	A 593	0 VDC OPTICS
TB1-F76	TB1-F56	AA 18	0 VDC OPTICS
TB1-F76	J17-R6	CC208	0 VDC OPTICS
TB1-F77	TB1-F78	TB 45	0 VDC OPTICS
TB1-F77	J09- 1	A 285	0 VDC OPTICS
TB1-F77	TB1-D77	AA 17	0 VDC OPTICS
TB1-F77	J18-R4	CC241	0 VDC OPTICS
TB1-F77	TB1-F76	TB 45	0 VDC OPTICS
TB1-F78	P11-G	A 517	0 VDC OPTICS
TB1-F78	J19-R1	CC271	0 VDC OPTICS
TB1-F78	J20-P4	CC324	0 VDC OPTICS
TB1-F78	TB1-F77	TB 45	0 VDC OPTICS
TB1-G 1	TB1-H 1	TB 4	25.6 KC HI IMU
TB1-G 1	J01- 50	A 14R	25.6 KC HI IMU
TB1-G 1	J02- 50	A 34R	25.6 KC HI IMU
TB1-G 1	J12-N4	CC 83R	25.6 KC HI IMU
TB1-G 2	TB1-H 2	TB 5	0 VDC IMU
TB1-G 2	J01- 60	A 14Y	25.6 KC LO IMU
TB1-G 2	J02- 60	A 34Y	25.6 KC LO IMU
TB1-G 2	J12-P5	CC 83W	25.6 KC LO IMU
TB1-G 3	J06- 24	A 104Y	ATTITUDE CONTROL RELAY CONTROL
TB1-G 3	P01- 24	A 128Y	ATTITUDE CONTROL RELAY CONTROL
TB1-G 3	J22- 42	CC325W	ATTITUDE CONTROL RELAY CONTROL
TB1-G 4	SHLD A 128	A 128B	STRUCTURE GROUND
TB1-G 4	TB1-G 8	AA 20	STRUCTURE GROUND
TB1-G 4	SHLD CC325	CC325B	STRUCTURE GROUND
TB1-G 4	TB1-H 4	TB 7	STRUCTURE GROUND
TB1-G 5	P01- 69	A 128R	LOCK CDU RELAY CONTROL

(CONT.)

FROM	TO	COND NO	CIRCUIT FUNCTION
TB1-G 5	J15-53	CC128W	LOCK CDU RELAY CONTROL
TB1-G 5	J22- 67	CC325R	LOCK CDU RELAY CONTROL
TB1-G 6	TB1-G 7	TB 11	+28 VDC IMU
TB1-G 6	J01- 16	A 7	+28 VDC IMU
TB1-G 6	J02- 16	A 27	+28 VDC IMU
TB1-G 6	J03- 16	A 47	+28 VDC IMU
TB1-G 6	J13-56	CC103	+28 VDC IMU
TB1-G 7	P01- 7	A 125	+28 VDC IMU
TB1-G 7	P03-H*	A 201	+28 VDC IMU
TB1-G 7	J20-L1	CC306	+28 VDC IMU
TB1-G 7	TB1-G 6	TB 11	+28 VDC IMU
TB1-G 8	TB1-G 9	TB 13	STRUCTURE GROUND
TB1-G 8	J06- 91	A 117	STRUCTURE GROUND
TB1-G 8	P01- 84	A 140	STRUCTURE GROUND
TB1-G 8	J08- 29	A 150	STRUCTURE GROUND
TB1-G 8	TB1-G 4	AA 20	STRUCTURE GROUND
TB1-G 9	TB1-G10	TB 13	STRUCTURE GROUND
TB1-G 9	J01- 41	A 13	STRUCTURE GROUND
TB1-G 9	J02- 41	A 33	STRUCTURE GROUND
TB1-G 9	TB1-G 8	TB 13	STRUCTURE GROUND
TB1-G10	TB1-G11	TB 13	STRUCTURE GROUND
TB1-G10	J03- 41	A 53	STRUCTURE GROUND
TB1-G10	J04- 41	A 70	STRUCTURE GROUND
TB1-G10	TB1-G 9	TB 13	STRUCTURE GROUND
TB1-G11	J05- 41	A 87	STRUCTURE GROUND
TB1-G11	P05- 1	A 210	STRUCTURE GROUND
TB1-G11	TB1-G10	TB 13	STRUCTURE GROUND
TB1-G12	SHLD A 204	A 204B	0 VDC IMU
TB1-G12	SHLD CC182	CC182B	0 VDC IMU
TB1-G12	TB1-H12	TB 14	0 VDC IMU
TB1-G12	TB1-F12	TB 14	0 VDC IMU
TB1-G13	P03-P	A 205Y	PITCH ERROR BODY AND BODY OFFSET AXIS LO

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(CONT.)

FROM	TO	COND NO	CIRCUIT FUNCTION
TB1-G13	J17-C1	CC201W	PITCH ERROR BODY AND BODY OFFSET AXIS LO
TB1-G14	P02-E	A 181R	SIN AOG 16X S2
TB1-G14	J16-D8	CC152W	SIN AOG 16X S2
TB1-G15	J03-101	A 57R	SIN AOG 16X S4
TB1-G15	P02-F	A 181Y	SIN AOG 16X S4
TB1-G15	J16-D9	CC152R	SIN AOG 16X S4
TB1-G16	J03- 87	A 57Y	SIN AOG 16X TO CDU
TB1-G16	J16-F9	CC152L	SIN AOG 16X TO CDU
TB1-G17	SHLD A 57	A 57B	0 VDC IMU
TB1-G17	SHLD A 181	A 181B	0 VDC IMU
TB1-G17	SHLD CC152	CC152B	0 VDC IMU
TB1-G17	TB1-H17	TB 15	0 VDC IMU
TB1-G17	TB1-F17	TB 15	0 VDC IMU
TB1-G18	J03- 32	A 50Y	OG CDU MDA OUTPUT
TB1-G18	J16-N2	CC154R	OG CDU MDA OUTPUT
TB1-G19	J03- 31	A 50G	OG CDU MDA OUTPUT
TB1-G19	J16-N1	CC154W	OG CDU MDA OUTPUT
TB1-G20	TB1-H20	TB 16	0 VDC IMU
TB1-G20	J03- 43	A 50R	0 VDC IMU
TB1-G20	TB1-D73	AA 14	0 VDC IMU
TB1-G21	P07-M	A 263R	Z PIP TORQUE -
TB1-G21	J14-P2	CC106R	Z PIP TORQUE -
TB1-G22	P07-L	A 263W	Z PIP TORQUE RET
TB1-G22	J14-P3	CC106W	Z PIP TORQUE RET
TB1-G23	P07-K	A 263L	Z PIP TORQUE +
TB1-G23	J14-P1	CC106L	Z PIP TORQUE +
TB1-G24	SHLD A 263	A 263B	0 VDC IMU
TB1-G24	TB1-G27	AA 21	0 VDC IMU
TB1-G24	SHLD CC106	CC106B	0 VDC IMU
TB1-G24	TB1-H24	TB 18	0 VDC IMU
TB1-G24	TB1-F24	TB 18	0 VDC IMU
TB1-G27	SHLD A 191	A 191B	0 VDC IMU

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(CONT.)

FROM	TO	COND NO	CIRCUIT FUNCTION
TB1-G27	SHLD A 193	A 193B	0 VDC IMU
TB1-G27	TB1-G24	AA 21	0 VDC IMU
TB1-G27	TB1-F27	TB 21	0 VDC IMU
TB1-G28	P03-A	A 191Y	X GYRO ERROR SIG
TB1-G28	P09- 76	A 380Y	X GYRO ERROR SIG
TB1-G28	J15-B1	CC130L	X GYRO ERROR SIG
TB1-G29	J03- 89	A 58	OG CDU 16X RSVR LOAD
TB1-G29	J16-C7	CC158	OG CDU 16X RSVR LOAD
TB1-G30	TB1-F32	A 571	OG CDU ERROR SIG RET
TB1-G30	J03- 90	A 59Y	OG CDU ERROR SIG RET
TB1-G30	P09- 31	A 338Y	OG CDU ERROR SIG RET
TB1-G30	J16-D6	CC147W	OG CDU ERROR SIG RET
TB1-G30	J17-B2	CC204R	OG CDU ERROR SIG RET
TB1-G31	J03-104	A 59R	OG CDU 16X ERROR SIG
TB1-G31	P09- 9	A 338R	OG CDU 16X ERROR SIG
TB1-G31	J16-C5	CC147R	OG CDU 16X ERROR SIG
TB1-G31	J17-A2	CC204W	OG CDU 16X ERROR SIG
TB1-G32	SHLD A 52	A 52B	OG CDU ERROR SIG RET
TB1-G32	SHLD A 145	A 145B	OG CDU ERROR SIG RET
TB1-G32	SHLD A 365	A 365B	OG CDU ERROR SIG RET
TB1-G32	SHLD CC204	CC204B	OG CDU ERROR SIG RET
TB1-G32	TB1-F32	TB 22	OG CDU ERROR SIG RET
TB1-G33	J03- 35	A 52R	OG CDU 1X ERROR SIG
TB1-G33	P01- 96	A 145R	OG CDU 1X ERROR SIG
TB1-G33	P09- 77	A 365R	OG CDU 1X ERROR SIG
TB1-G33	J11-A3	CC 64W	OG CDU 1X ERROR SIG
TB1-G33	J16-C6	CC146W	OG CDU 1X ERROR SIG
TB1-G34	J03- 45	A 52Y	OG CDU ERROR SIG RET
TB1-G34	P01- 97	A 145Y	OG CDU ERROR SIG RET
TB1-G34	P09- 61	A 365Y	OG CDU ERROR SIG RET
TB1-G34	J11-B3	CC 64R	OG CDU ERROR SIG RET
TB1-G34	J16-D6	CC146R	OG CDU ERROR SIG RET

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FROM	TO	COND NO	CIRCUIT FUNCTION
TB1-G35	J03- 34	A 51	OG CDU 1X RSVR LOAD
TB1-G35	J16-F6	CC157	OG CDU 1X RSVR LOAD
TB1-G36	SHLD A 77	A 77B	0 VDC OPTICS
TB1-G36	SHLD CC269	CC269B	0 VDC OPTICS
TB1-G36	TB1-H36	TB 23	0 VDC OPTICS
TB1-G36	TB1-F36	TB 23	0 VDC OPTICS
TB1-G37	J04-106	A 77R	SHAFT CDU TACH HI
TB1-G37	J19-A9	CC269R	SHAFT CDU TACH HI
TB1-G38	J04- 92	A 77Y	SHAFT CDU TACH LO
TB1-G38	J19-B9	CC269W	SHAFT CDU TACH LO
TB1-G39	SHLD A 76	A 76B	0 VDC OPTICS
TB1-G39	SHLD CC267	CC267B	0 VDC OPTICS
TB1-G39	TB1-H39	TB 24	0 VDC OPTICS
TB1-G39	TB1-F39	TB 24	0 VDC OPTICS
TB1-G40	J04-104	A 76Y	SHAFT CDU 16X RSVR S2
TB1-G40	J19-B8	CC267W	SHAFT CDU 16X RSVR S2
TB1-G41	J04- 90	A 76R	SHAFT CDU 16X RSVR S3
TB1-G41	J19-B7	CC267R	SHAFT CDU 16X RSVR S3
TB1-G42	SHLD A 270	A 270B	0 VDC OPTICS
TB1-G42	SHLD CC221	CC221B	0 VDC OPTICS
TB1-G42	TB1-H42	TB 25	0 VDC OPTICS
TB1-G42	TB1-F42	TB 25	0 VDC OPTICS
TB1-G43	P08- 12	A 270R	SCT TRUNNION 1X RSVR P3
TB1-G43	J18-D4	CC221R	SCT TRUNNION 1X RSVR P3
TB1-G44	P08- 13	A 270Y	SCT TRUNNION 1X RSVR P1
TB1-G44	J18-D3	CC221W	SCT TRUNNION 1X RSVR P1
TB1-G45	P05- 51	A 226Y	SXT SHAFT 1X RSVR S4
TB1-G45	P08- 42	A 279Y	SCT SHAFT 1X RSVR P4
TB1-G46	P05- 52	A 226R	SXT SHAFT 1X RSVR S2
TB1-G46	P08- 41	A 279R	SCT SHAFT 1X RSVR P2
TB1-G47	SHLD A 226	A 226B	0 VDC OPTICS
TB1-G47	SHLD A 279	A 279B	0 VDC OPTICS

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FROM	TO	COND NO	CIRCUIT FUNCTION
TB1-G47	TB1-H47	TB 26	0 VDC OPTICS
TB1-G47	TB1-F47	TB 26	0 VDC OPTICS
TB1-G48	P05- 36	A 214Y	SXT SHAFT MOTOR PHASE 1
TB1-G48	J18-T5	CC238W	SXT SHAFT MOTOR PHASE 1
TB1-G49	P05- 8	A 214R	SXT SHAFT MOTOR PHASE 2
TB1-G49	J18-S5	CC238R	SXT SHAFT MOTOR PHASE 2
TB1-G50	TB1-H50	TB 28	0 VDC OPTICS
TB1-G50	P05- 16	A 212G	0 VDC OPTICS
TB1-G50	P05- 19	A 214G	0 VDC OPTICS
TB1-G50	P12-G	A 547	0 VDC OPTICS
TB1-G51	P05- 5	A 212R	SXT TRUNNION MOTOR PHASE 2
TB1-G51	J18-S6	CC232R	SXT TRUNNION MOTOR PHASE 2
TB1-G52	P05- 33	A 212Y	SXT TRUNNION MOTOR PHASE 1
TB1-G52	J18-T6	CC232W	SXT TRUNNION MOTOR PHASE 1
TB1-G53	TB1-H53	TB 29	0 VDC OPTICS
TB1-G53	P12-G	A 546	0 VDC OPTICS
TB1-G53	J16-R6	CC179	0 VDC OPTICS
TB1-G54	P09- 55	A 361	TRACKER Y DRIVE BUFFERED HI
TB1-G54	P13- 6	A 494R	TRACKER Y DRIVE BUFFERED HI
TB1-G54	J18-C8	CC227	TRACKER Y DRIVE BUFFERED HI
TB1-G55	P09- 54	A 360	TRACKER X DRIVE BUFFERED HI
TB1-G55	P13- 5	A 493R	TRACKER X DRIVE BUFFERED HI
TB1-G55	J18-C7	CC226	TRACKER X DRIVE BUFFERED HI
TB1-G56	P09- 71	A 375	TRACKER PREAMP OUTPUT BUFFERED HI
TB1-G56	P13- 15	A 495R	TRACKER PREAMP OUTPUT BUFFERED HI
TB1-G56	J18-C9	CC228	TRACKER PREAMP OUTPUT BUFFERED HI
TB1-G57	P09- 19	A 342	CDU TRUNNION 16X RSVR ERROR SIG BUFFERED
TB1-G57	J19-M1	CC243	CDU TRUNNION 16X RSVR ERROR SIG BUFFERED
TB1-G58	P09- 39	A 352	SHAFT CDU TACH FEEDBACK SIG BUFFERED
TB1-G58	J19-M4	CC248	SHAFT CDU TACH FEEDBACK SIG BUFFERED
TB1-G59	J09-100	A 325R	IMU HTR CURRENT AMP PIN 5
TB1-G59	J17-N6	CC186K	IMU HTR CURRENT AMP PIN 5

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FROM	TO	COND NO	CIRCUIT FUNCTION
TB1-G60	J09- 88	A 325N	IMU TEMP CONT K2 PIN 5
TB1-G60	J17-N5	CC186L	IMU TEMP CONT K2 PIN 5
TB1-G61	P06-P	A 253Y	ACCEL TEMP IND SENSOR RET
TB1-G61	J17-D5	CC185W	ACCEL TEMP IND SENSOR RET
TB1-G62	J09- 98	A 329N	ACCEL BRIDGE AMP PIN 6
TB1-G62	J17-F7	CC185K	ACCEL BRIDGE AMP PIN 6
TB1-G63	J09-104	A 329R	ACCEL ZERO DEVIATION CHECK
TB1-G63	J17-D7	CC185R	ACCEL ZERO DEVIATION CHECK
TB1-G64	J09-103	A 329G	IMU IMU TEMP CONT +5 DEG GAIN CHECK
TB1-G64	J17-D6	CC185L	IMU IMU TEMP CONT +5 DEG GAIN CHECK
TB1-G65	P13- 24	A 497Y	TRACKER X ERROR LO
TB1-G65	J20-C7	CC274W	TRACKER X ERROR LO
TB1-G66	P13- 32	A 497R	TRACKER X ERROR HI
TB1-G66	J20-C6	CC274R	TRACKER X ERROR HI
TB1-G67	SHLD A 305	A 305B	0 VDC OPTICS
TB1-G67	SHLD A 497	A 497B	0 VDC OPTICS
TB1-G67	SHLD CC281	CC281B	0 VDC OPTICS
TB1-G67	TB1-H67	TB 34	0 VDC OPTICS
TB1-G67	TB1-F67	TB 34	0 VDC OPTICS
TB1-G68	J09- 43	A 305R	PHOTOMETER MARK REJECT HI
TB1-G68	J20-F6	CC281R	PHOTOMETER MARK REJECT HI
TB1-G69	J09- 60	A 305Y	PHOTOMETER MARK REJECT LO
TB1-G69	J20-F7	CC281W	PHOTOMETER MARK REJECT LO
TB1-G70	TB1-H70	TB 37	STRUCTURE GROUND
TB1-G70	P06-G	A 249	STRUCTURE GROUND
TB1-G70	P08- 59	A 284	STRUCTURE GROUND
TB1-G70	P11-L	A 527	STRUCTURE GROUND
TB1-G70	J17-L6	CC207	STRUCTURE GROUND
TB1-G71	P06-D	A 244	+28 VDC IMU
TB1-G71	P09- 49	A 359	+28 VDC IMU
TB1-G71	J20-L1	CC307	+28 VDC IMU
TB1-G71	J20-L2	CC308	+28 VDC IMU

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FROM	TO	COND NO	CIRCUIT FUNCTION	
TB1-G72	P09- 82	A 383R	+20 VDC CONDITIONING	
TB1-G72	J20-G2	CC294R	+20 VDC CONDITIONING	
TB1-G73	P09- 46	A 356	+3 VDC AGC	
TB1-G73	J20-F4	CC293	+3 VDC AGC	
TB1-G73	J24- 6	CC335	+3 VDC AGC	175
TB1-G74	P09- 62	A 366	+13 VDC AGC	
TB1-G74	J20-D4	CC292	+13 VDC AGC	
TB1-G74	J24- 1	CC333	+13 VDC AGC	176
TB1-G75	P12-M	A 554	+28 VDC STBY BUSS B	
TB1-G75	P12-M	A 555	+28 VDC STBY BUSS B	
TB1-G75	J20-T4	CC300	+28 VDC STBY BUSS B	
TB1-G75	J20-S4	CC317	+28 VDC STBY BUSS B	
TB1-G76	P11-M	A 528	+28 VDC STBY BUSS A	
TB1-G76	P11-M	A 529	+28 VDC STBY BUSS A	
TB1-G76	J20-T3	CC299	+28 VDC STBY BUSS A	
TB1-G76	J20-S3	CC316	+28 VDC STBY BUSS A	
TB1-G77	P12-H	A 548	+28 VDC OPTICS BUSS B	
TB1-G77	P12-H	A 549	+28 VDC OPTICS BUSS B	
TB1-G77	J20-S6	CC305	+28 VDC OPTICS BUSS B	
TB1-G77	J20-R6	CC319	+28 VDC OPTICS BUSS B	
TB1-G78	P11-H	A 520	+28 VDC OPTICS BUSS A	
TB1-G78	P11-H	A 521	+28 VDC OPTICS BUSS A	
TB1-G78	J20-T5	CC302	+28 VDC OPTICS BUSS A	
TB1-G78	J20-R5	CC318	+28 VDC OPTICS BUSS A	
TB1-H 1	J03- 50	A 54R	25.6 KC HI IMU	
TB1-H 1	P09-105	A 387R	25.6 KC HI IMU	
TB1-H 1	TB1-G 1	TB 4	25.6 KC HI IMU	
TB1-H 2	J03- 60	A 54Y	25.6 KC LO IMU	
TB1-H 2	P09- 87	A 387Y	25.6 KC LO IMU	
TB1-H 2	TB1-G 2	TB 5	0 VDC IMU	
TB1-H 3	P01- 57	A 128G	ENTRY RELAY CONTROL	
TB1-H 3	J16-M1	CC159W	ENTRY RELAY CONTROL	

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FROM	TO	COND NO	CIRCUIT FUNCTION
TB1-H 4	SHLD A 104	A 104B	STRUCTURE GROUND
TB1-H 4	SHLD CC128	CC128B	STRUCTURE GROUND
TB1-H 4	TB1-K 4	TB 7	STRUCTURE GROUND
TB1-H 4	J11-L4	CC 80	STRUCTURE GROUND
TB1-H 4	TB1-G 4	TB 7	STRUCTURE GROUND
TB1-H 5	P01- 5	A 124R	FINE ALIGN RELAY CONTROL
TB1-H 5	J15-H4	CC128R	FINE ALIGN RELAY CONTROL
TB1-H 5	J22- 68	CC325L	FINE ALIGN RELAY CONTROL
TB1-H 7	P02-S	A 187Y	3200 CPS 2 V LO
TB1-H 7	J11-M2	CC 67R	3200 CPS 2 V LO
TB1-H 7	J11-L2	CC 67W	3200 CPS 2 V LO
TB1-H 8	P02-U	A 188Y	3200 CPS 2 V FEEDBACK LO
TB1-H 8	P09- 88	A 374Y	3200 CPS 2 V FEEDBACK LO
TB1-H 8	J11-G3	CC 73W	3200 CPS 2 V FEEDBACK LO
TB1-H 9	P02-H	A 183Y	COS AMG 16X S1
TB1-H 9	J16-H3	CC164R	COS AMG 16X S1
TB1-H10	J02-100	A 36R	COS AMG 16X S3
TB1-H10	P02-G	A 183R	COS AMG 16X S3
TB1-H10	J16-G3	CC164W	COS AMG 16X S3
TB1-H11	J02- 86	A 36Y	COS AMG 16X TO CDU
TB1-H11	J16-G4	CC164L	COS AMG 16X TO CDU
TB1-H12	SHLD A 36	A 36B	0 VDC IMU
TB1-H12	SHLD A 183	A 183B	0 VDC IMU
TB1-H12	SHLD A 188	A 188B	0 VDC IMU
TB1-H12	TB1-K17	AA 22	0 VDC IMU
TB1-H12	SHLD CC164	CC164B	0 VDC IMU
TB1-H12	TB1-K12	TB 14	0 VDC IMU
TB1-H12	TB1-G12	TB 14	0 VDC IMU
TB1-H13	P03-N	A 204R	PITCH YAW RSVR S3
TB1-H13	J17-D2	CC182R	PITCH YAW RSVR S3
TB1-H14	P02-X	A 189Y	COS AIG 16X S1
TB1-H14	J16-H1	CC163R	COS AIG 16X S1

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FROM	TO	COND NO	CIRCUIT FUNCTION
TB1-H15	J01-100	A 16R	COS AIG 16X S3
TB1-H15	P02-W	A 189R	COS AIG 16X S3
TB1-H15	J16-G1	CC163W	COS AIG 16X S3
TB1-H16	J01- 86	A 16Y	COS AIG 16X TO CDU
TB1-H16	J16-G2	CC163L	COS AIG 16X TO CDU
TB1-H17	SHLD A 16	A 16B	0 VDC IMU
TB1-H17	SHLD A 189	A 189B	0 VDC IMU
TB1-H17	TB1-K24	AA 23	0 VDC IMU
TB1-H17	SHLD CC163	CC163B	0 VDC IMU
TB1-H17	TB1-K17	TB 15	0 VDC IMU
TB1-H17	TB1-G17	TB 15	0 VDC IMU
TB1-H18	J02- 32	A 30Y	MG CDU MDA OUTPUT
TB1-H18	J16-P3	CC142R	MG CDU MDA OUTPUT
TB1-H19	J02- 31	A 30G	MG CDU MDA OUTPUT
TB1-H19	J16-R3	CC142W	MG CDU MDA OUTPUT
TB1-H20	TB1-K20	TB 16	0 VDC IMU
TB1-H20	J02- 43	A 30R	0 VDC IMU
TB1-H20	TB1-G20	TB 16	0 VDC IMU
TB1-H21	P07-R	A 264R	Y PIP TORQUE -
TB1-H21	J13-N3	CC 99R	Y PIP TORQUE -
TB1-H22	P07-P	A 264W	Y PIP TORQUE RET
TB1-H22	J13-M3	CC 99W	Y PIP TORQUE RET
TB1-H23	P07-N	A 264L	Y PIP TORQUE +
TB1-H23	J13-L3	CC 99L	Y PIP TORQUE +
TB1-H24	SHLD A 264	A 264B	0 VDC IMU
TB1-H24	SHLD CC 99	CC 99B	0 VDC IMU
TB1-H24	TB1-K24	TB 18	0 VDC IMU
TB1-H24	TB1-F74	AA 19	0 VDC IMU
TB1-H24	TB1-G24	TB 18	0 VDC IMU
TB1-H25	TB1-H26	TB 19	0 VDC IMU
TB1-H25	TB1-D74	AA 15	0 VDC IMU
TB1-H25	J14-R6	CC113	0 VDC IMU

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FROM	TO	COND NO	CIRCUIT FUNCTION
TB1-H26	TB1-K26	A 570	0 VDC IMU
TB1-H26	P06-E	A 246	0 VDC IMU
TB1-H26	J11-R5	CC 76	0 VDC IMU
TB1-H26	TB1-H25	TB 19	0 VDC IMU
TB1-H28	SHLD A 203	A 203B	MG CDU ERROR SIG RET
TB1-H28	P03-K	A 203R	MG CDU ERROR SIG RET
TB1-H28	J11-B2	CC 63W	MG CDU ERROR SIG RET
TB1-H29	P03-L	A 203Y	MG CDU ATTITUDE STEERING ERROR
TB1-H29	J11-C2	CC 63R	MG CDU ATTITUDE STEERING ERROR
TB1-H30	SHLD A 38	A 38B	MG CDU ERROR SIG RET
TB1-H30	TB1-H32	AA 24	MG CDU ERROR SIG RET
TB1-H30	J02- 90	A 38Y	MG CDU ERROR SIG RET
TB1-H30	J16-D4	CC140R	MG CDU ERROR SIG RET
TB1-H31	J02-104	A 38R	MG CDU 16X ERROR SIG
TB1-H31	J16-C3	CC140W	MG CDU 16X ERROR SIG
TB1-H32	SHLD A 32	A 32B	MG CDU ERROR SIG RET
TB1-H32	SHLD A 139	A 139B	MG CDU ERROR SIG RET
TB1-H32	SHLD A 355	A 355B	MG CDU ERROR SIG RET
TB1-H32	TB1-H30	AA 24	MG CDU ERROR SIG RET
TB1-H33	J02- 35	A 32R	MG CDU 1X ERROR SIG
TB1-H33	P01- 82	A 139R	MG CDU 1X ERROR SIG
TB1-H33	P09- 60	A 355R	MG CDU 1X ERROR SIG
TB1-H33	J11-A2	CC 62W	MG CDU 1X ERROR SIG
TB1-H33	J16-C4	CC139W	MG CDU 1X ERROR SIG
TB1-H34	J02- 45	A 32Y	MG CDU ERROR SIG RET
TB1-H34	P01- 83	A 139Y	MG CDU ERROR SIG RET
TB1-H34	P09- 43	A 355Y	MG CDU ERROR SIG RET
TB1-H34	J11-B2	CC 62R	MG CDU ERROR SIG RET
TB1-H34	J16-D4	CC139R	MG CDU ERROR SIG RET
TB1-H35	J02- 34	A 31	MG CDU 1X RSVR LOAD
TB1-H35	J16-F4	CC156	MG CDU 1X RSVR LOAD
TB1-H36	SHLD A 219	A 219B	0 VDC OPTICS

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FROM	TO	COND NO	CIRCUIT FUNCTION
TB1-H36	SHLD CC239	CC239B	0 VDC OPTICS
TB1-H36	TB1-K36	TB 23	0 VDC OPTICS
TB1-H36	TB1-G36	TB 23	0 VDC OPTICS
TB1-H37	P05- 23	A 219R	SXT SHAFT TACH HI
TB1-H37	J18-A7	CC239R	SXT SHAFT TACH HI
TB1-H38	P05- 24	A 219Y	SXT SHAFT TACH LO
TB1-H38	J18-B7	CC239W	SXT SHAFT TACH LO
TB1-H39	SHLD A 66	A 66B	0 VDC OPTICS
TB1-H39	TB1-K36	AA 25	0 VDC OPTICS
TB1-H39	SHLD CC263	CC263B	0 VDC OPTICS
TB1-H39	TB1-K39	TB 24	0 VDC OPTICS
TB1-H39	TB1-G39	TB 24	0 VDC OPTICS
TB1-H40	J04- 11	A 66Y	SHAFT CDU 1/2X RSVR P1
TB1-H40	J19-C8	CC263W	SHAFT CDU 1/2X RSVR P1
TB1-H41	J04- 25	A 66R	SHAFT CDU 1/2X RSVR P3
TB1-H41	J19-C9	CC263R	SHAFT CDU 1/2X RSVR P3
TB1-H42	SHLD A 89	A 89B	0 VDC OPTICS
TB1-H42	TB1-K39	AA 26	0 VDC OPTICS
TB1-H42	SHLD CC254	CC254B	0 VDC OPTICS
TB1-H42	TB1-K42	TB 25	0 VDC OPTICS
TB1-H42	TB1-G42	TB 25	0 VDC OPTICS
TB1-H43	J05- 66	A 89Y	TRUNNION CDU 1/2X RSVR S4
TB1-H43	J19-K2	CC254W	TRUNNION CDU 1/2X RSVR S4
TB1-H44	J05- 56	A 89R	TRUNNION CDU 1/2X RSVR S2
TB1-H44	J19-K1	CC254R	TRUNNION CDU 1/2X RSVR S2
TB1-H45	J04- 20	A 64R	SHAFT CDU 1X RSVR P3
TB1-H45	J19-K5	CC265R	SHAFT CDU 1X RSVR P3
TB1-H46	J04- 6	A 64Y	SHAFT CDU 1X RSVR P1
TB1-H46	J19-K4	CC265W	SHAFT CDU 1X RSVR P1
TB1-H47	SHLD A 64	A 64B	0 VDC OPTICS
TB1-H47	TB1-K42	AA 27	0 VDC OPTICS
TB1-H47	SHLD CC265	CC265B	0 VDC OPTICS

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FROM	TO	COND NO	CIRCUIT FUNCTION
TB1-H47	TB1-K47	TB 26	0 VDC OPTICS
TB1-H47	TB1-G47	TB 26	0 VDC OPTICS
TB1-H48	J04- 31	A 68Y	SHAFT CDU MOTOR PHASE 1
TB1-H48	J19-S2	CC268W	SHAFT CDU MOTOR PHASE 1
TB1-H49	J04- 32	A 68R	SHAFT CDU MOTOR PHASE 2
TB1-H49	J19-T2	CC268R	SHAFT CDU MOTOR PHASE 2
TB1-H50	TB1-K50	TB 28	0 VDC OPTICS
TB1-H50	J04- 43	A 68G	0 VDC OPTICS
TB1-H50	P08- 7	A 268G	0 VDC OPTICS
TB1-H50	TB1-G50	TB 28	0 VDC OPTICS
TB1-H51	P08- 5	A 268R	SCT SHAFT MOTOR PHASE 2
TB1-H51	J18-S4	CC236R	SCT SHAFT MOTOR PHASE 2
TB1-H52	P08- 6	A 268Y	SCT SHAFT MOTOR PHASE 1
TB1-H52	J18-T4	CC236W	SCT SHAFT MOTOR PHASE 1
TB1-H53	TB1-K53	TB 29	0 VDC OPTICS
TB1-H53	J12-R6	CC 94	0 VDC OPTICS
TB1-H53	TB1-G53	TB 29	0 VDC OPTICS
TB1-H54	P09- 38	A 351	SCT SHAFT 1X ERROR SIG BUFFERED
TB1-H54	J18-M5	CC217	SCT SHAFT 1X ERROR SIG BUFFERED
TB1-H55	P09- 21	A 344	SXT TRUNNION TACH FEEDBACK BUFFERED
TB1-H55	J18-M2	CC220	SXT TRUNNION TACH FEEDBACK BUFFERED
TB1-H56	P09- 73	A 377	SXT TRUNNION MDA INPUT BUFFERED
TB1-H56	J18-M1	CC222	SXT TRUNNION MDA INPUT BUFFERED
TB1-H57	P09- 22	A 345	TRUNNION CDU TACH FEEDBACK BUFFERED
TB1-H57	J19-M2	CC244	TRUNNION CDU TACH FEEDBACK BUFFERED
TB1-H58	P09- 20	A 343	SHAFT CDU 16X ERROR SIG BUFFERED
TB1-H58	J19-M3	CC242	SHAFT CDU 16X ERROR SIG BUFFERED
TB1-H59	J09-101	A 325Y	IMU TEMP CONT K1 PIN 3
TB1-H59	J17-M5	CC186W	IMU TEMP CONT K1 PIN 3
TB1-H60	J09- 87	A 325G	IMU TEMP CONT AMP PIN 5
TB1-H60	J17-M6	CC186R	IMU TEMP CONT AMP PIN 5
TB1-H61	P06-K	A 251	IMU TEMP SENSOR COM

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(CONT.)

FROM	TO	COND NO	CIRCUIT FUNCTION
TB1-H61	J17-M2	CC199	IMU TEMP SENSOR COM
TB1-H62	P06-N	A 253R	ACCEL INDICATING SENSOR HI
TB1-H62	J09- 97	A 329Y	ACCEL INDICATING SENSOR HI
TB1-H63	P06-M	A 252R	IRIG TEMP CONT SENSOR HI
TB1-H63	J17-B6	CC191R	IRIG TEMP CONT SENSOR HI
TB1-H64	P06-L	A 252Y	IRIG TEMP CONT SENSOR RET
TB1-H64	J17-B5	CC191W	IRIG TEMP CONT SENSOR RET
TB1-H65	P05- 89	A 239Y	STAR PRESENCE INPUT LO
TB1-H65	J20-A8	CC277W	STAR PRESENCE INPUT LO
TB1-H66	P05- 88	A 239R	STAR PRESENCE INPUT HI
TB1-H66	J20-A7	CC277R	STAR PRESENCE INPUT HI
TB1-H67	SHLD A 239	A 239B	0 VDC OPTICS
TB1-H67	SHLD A 291	A 291B	0 VDC OPTICS
TB1-H67	TB1-K47	AA 28	0 VDC OPTICS
TB1-H67	TB1-K67	TB 34	0 VDC OPTICS
TB1-H67	TB1-G67	TB 34	0 VDC OPTICS
TB1-H68	J09- 10	A 291R	SHAFT HAND CONTROLLER OUTPUT HI
TB1-H68	J19-D8	CC250R	SHAFT HAND CONTROLLER OUTPUT HI
TB1-H69	J09- 24	A 291Y	SHAFT HAND CONTROLLER OUTPUT LO
TB1-H69	J19-D7	CC250W	SHAFT HAND CONTROLLER OUTPUT LO
TB1-H70	TB1-K70	TB 37	STRUCTURE GROUND
TB1-H70	J09- 91	A 326	STRUCTURE GROUND
TB1-H70	P09- 10	A 339	STRUCTURE GROUND
TB1-H70	P10- 1	A 406	STRUCTURE GROUND
TB1-H70	TB1-G70	TB 37	STRUCTURE GROUND
TB1-H71	J09- 71	A 317	+28 VDC OPTICS
TB1-H71	P09- 6	A 336	+28 VDC OPTICS
TB1-H71	P10- 14	A 412	+28 VDC OPTICS
TB1-H71	J19-T5	CC247	+28 VDC OPTICS
TB1-H71	J20-N6	CC279	+28 VDC OPTICS
TB1-H72	P09- 47	A 357	+28 VDC STBY
TB1-H72	J20-R3	CC301	+28 VDC STBY

(CONT.)

FROM	TO	COND NO	CIRCUIT FUNCTION	
TB1-H73	P09- 63	A 367	0 VDC AGC	
TB1-H73	J20-G3	CC291	0 VDC AGC	
TB1-H73	J24- 3	CC334	0 VDC AGC	177
TB1-H74	P09- 64	A 368	+28 VDC AGC	
TB1-H74	J20-F5	CC289	+28 VDC AGC	
TB1-H74	J24- 11	CC290	+28 VDC AGC	166
TB1-H75	P12-C	A 536	+28 VDC IMU BUSS B	
TB1-H75	P12-C	A 537	+28 VDC IMU BUSS B	
TB1-H75	P12-C	A 538	+28 VDC IMU BUSS B	
TB1-H75	J20-S2	CC298	+28 VDC IMU BUSS B	
TB1-H75	J20-P2	CC315	+28 VDC IMU BUSS B	
TB1-H76	P11-C	A 508	+28 VDC IMU BUSS A	
TB1-H76	P11-C	A 509	+28 VDC IMU BUSS A	
TB1-H76	P11-C	A 510	+28 VDC IMU BUSS A	
TB1-H76	J20-S1	CC296	+28 VDC IMU BUSS A	
TB1-H76	J20-P1	CC313	+28 VDC IMU BUSS A	
TB1-H77	P12-H	A 550	+28 VDC OPTICS BUSS B	
TB1-H77	J20-T6	CC304	+28 VDC OPTICS BUSS B	
TB1-H78	P11-H	A 522	+28 VDC OPTICS BUSS A	
TB1-H78	J20-S5	CC303	+28 VDC OPTICS BUSS A	
TB1-K 1	J04- 50	A 71R	25.6 KC HI OPTICS	
TB1-K 1	J05- 50	A 88R	25.6 KC HI OPTICS	
TB1-K 1	P09-126	A 395R	25.6 KC HI OPTICS	
TB1-K 1	J12-P6	CC 82R	25.6 KC HI OPTICS	
TB1-K 2	J04- 60	A 71Y	25.6 KC LO OPTICS	
TB1-K 2	J05- 60	A 88Y	25.6 KC LO OPTICS	
TB1-K 2	P09-104	A 395Y	25.6 KC LO OPTICS	
TB1-K 2	J12-N6	CC 82W	25.6 KC LO OPTICS	
TB1-K 3	P01- 4	A 124G	COARSE ALIGN RELAY CONTROL	
TB1-K 3	J11-L3	CC 72	COARSE ALIGN RELAY CONTROL	
TB1-K 4	SHLD A 124	A 124B	STRUCTURE GROUND	
TB1-K 4	SHLD CC159	CC159B	STRUCTURE GROUND	

(CONT.)

FROM	TO	COND NO	CIRCUIT FUNCTION
TB1-K 4	E 2	CC341	STRUCTURE GROUND
TB1-K 4	TB1-H 4	TB 7	STRUCTURE GROUND
TB1-K 5	P01- 12	A 124Y	ZERO ENCODER RELAY CONTROL
TB1-K 5	J15-S1	CC128L	ZERO ENCODER RELAY CONTROL
TB1-K 7	P02-R	A 187R	3200 CPS 2 V HI
TB1-K 7	J11-M1	CC 67K	3200 CPS 2 V HI
TB1-K 7	J11-L1	CC 67L	3200 CPS 2 V HI
TB1-K 8	P02-T	A 188R	3200 CPS 2 V FEEDBACK HI
TB1-K 8	P09- 70	A 374R	3200 CPS 2 V FEEDBACK HI
TB1-K 8	J11-F3	CC 73R	3200 CPS 2 V FEEDBACK HI
TB1-K 9	P02-J	A 184R	SIN AMG 16X S2
TB1-K 9	J15-F8	CC127W	SIN AMG 16X S2
TB1-K10	J02-101	A 37R	SIN AMG 16X S4
TB1-K10	P02-K	A 184Y	SIN AMG 16X S4
TB1-K10	J15-F9	CC127R	SIN AMG 16X S4
TB1-K11	J02- 87	A 37Y	SIN AMG 16X TO CDU
TB1-K11	J15-D9	CC127L	SIN AMG 16X TO CDU
TB1-K12	SHLD A 37	A 37B	0 VDC IMU
TB1-K12	SHLD A 184	A 184B	0 VDC IMU
TB1-K12	SHLD CC127	CC127B	0 VDC IMU
TB1-K12	TB1-H12	TB 14	0 VDC IMU
TB1-K13	P03-M	A 204Y	YAW ERROR BODY OFFSET AXIS LO
TB1-K13	J17-D3	CC182W	YAW ERROR BODY OFFSET AXIS LO
TB1-K14	P02-Y	A 190R	SIN AIG 16X S2
TB1-K14	J15-D8	CC126W	SIN AIG 16X S2
TB1-K15	J01-101	A 17R	SIN AIG 16X S4
TB1-K15	P02-Z	A 190Y	SIN AIG 16X S4
TB1-K15	J15-D7	CC126R	SIN AIG 16X S4
TB1-K16	J01- 87	A 17Y	SIN AIG 16X TO CDU
TB1-K16	J15-F7	CC126L	SIN AIG 16X TO CDU
TB1-K17	SHLD A 17	A 17B	0 VDC IMU
TB1-K17	SHLD A 190	A 190B	0 VDC IMU

(CONT.)

FROM	TO	COND NO	CIRCUIT FUNCTION
TB1-K17	SHLD CC126	CC126B	0 VDC IMU
TB1-K17	TB1-H12	AA 22	0 VDC IMU
TB1-K17	TB1-H17	TB 15	0 VDC IMU
TB1-K18	J01- 31	A 10G	IG CDU MDA OUTPUT
TB1-K18	J16-R1	CC137W	IG CDU MDA OUTPUT
TB1-K19	J01- 32	A 10Y	IG CDU MDA OUTPUT
TB1-K19	J16-P1	CC137R	IG CDU MDA OUTPUT
TB1-K20	J01- 43	A 10R	0 VDC IMU
TB1-K20	TB1-B70	AA 11	0 VDC IMU
TB1-K20	TB1-H20	TB 16	0 VDC IMU
TB1-K21	P07-W	A 265R	X PIP TORQUE -
TB1-K21	J13-L1	CC 96R	X PIP TORQUE -
TB1-K22	P07-V	A 265W	X PIP TORQUE RET
TB1-K22	J13-K1	CC 96W	X PIP TORQUE RET
TB1-K23	P07-U	A 265L	X PIP TORQUE +
TB1-K23	J13-H1	CC 96L	X PIP TORQUE +
TB1-K24	SHLD A 265	A 265B	0 VDC IMU
TB1-K24	SHLD CC 96	CC 96B	0 VDC IMU
TB1-K24	TB1-H17	AA 23	0 VDC IMU
TB1-K24	TB1-H24	TB 18	0 VDC IMU
TB1-K25	TB1-K26	TB 20	0 VDC IMU
TB1-K25	TB1-D75	AA 16	0 VDC IMU
TB1-K25	J12-R5	CC 93	0 VDC IMU
TB1-K26	TB1-H26	A 570	0 VDC IMU
TB1-K26	J11-S6	CC 77	0 VDC IMU
TB1-K26	J15-R2	CC131	0 VDC IMU
TB1-K26	TB1-K25	TB 20	0 VDC IMU
TB1-K28	SHLD A 200	A 200B	IG CDU ERROR SIG RET
TB1-K28	P03-J	A 200R	IG CDU ERROR SIG RET
TB1-K28	J11-B1	CC 61W	IG CDU ERROR SIG RET
TB1-K29	P03-H	A 200Y	IG CDU ATTITUDE STEERING ERROR
TB1-K29	J11-C1	CC 61R	IG CDU ATTITUDE STEERING ERROR

(CONT.)

FROM	TO	COND NO	CIRCUIT FUNCTION
TB1-K30	SHLD A 18	A 18B	IG CDU ERROR SIG RET
TB1-K30	TB1-K32	AA 29	IG CDU ERROR SIG RET
TB1-K30	J01- 90	A 18Y	IG CDU ERROR SIG RET
TB1-K30	J16-D2	CC135R	IG CDU ERROR SIG RET
TB1-K31	J01-104	A 18R	IG CDU 16X ERROR SIG
TB1-K31	J16-C1	CC135W	IG CDU 16X ERROR SIG
TB1-K32	SHLD A 12	A 12B	IG CDU ERROR SIG RET
TB1-K32	SHLD A 135	A 135B	IG CDU ERROR SIG RET
TB1-K32	SHLD A 354	A 354B	IG CDU ERROR SIG RET
TB1-K32	TB1-K30	AA 29	IG CDU ERROR SIG RET
TB1-K33	J01- 35	A 12R	IG CDU 1X ERROR SIG S2
TB1-K33	P01- 70	A 135R	IG CDU 1X ERROR SIG
TB1-K33	P09- 59	A 354R	IG CDU 1X ERROR SIG
TB1-K33	J11-A1	CC 60W	IG CDU 1X ERROR SIG
TB1-K33	J16-C2	CC134W	IG CDU 1X ERROR SIG
TB1-K34	J01- 45	A 12Y	IG CDU ERROR SIG RET
TB1-K34	P01- 71	A 135Y	IG CDU ERROR SIG RET
TB1-K34	P09- 41	A 354Y	IG CDU ERROR SIG RET
TB1-K34	J11-B1	CC 60R	IG CDU ERROR SIG RET
TB1-K34	J16-D2	CC134R	IG CDU ERROR SIG RET
TB1-K35	J01- 34	A 11	IG CDU 1X RSVR LOAD S1
TB1-K35	J16-F2	CC155	IG CDU 1X RSVR LOAD
TB1-K36	SHLD A 278	A 278B	0 VDC OPTICS
TB1-K36	SHLD CC237	CC237B	0 VDC OPTICS
TB1-K36	TB1-H39	AA 25	0 VDC OPTICS
TB1-K36	TB1-H36	TB 23	0 VDC OPTICS
TB1-K37	P08- 38	A 278R	SCT SHAFT TACH HI
TB1-K37	J18-A5	CC237R	SCT SHAFT TACH HI
TB1-K38	P08- 39	A 278Y	SCT SHAFT TACH LO
TB1-K38	J18-B5	CC237W	SCT SHAFT TACH LO
TB1-K39	SHLD A 281	A 281B	0 VDC OPTICS
TB1-K39	SHLD CC235	CC235B	0 VDC OPTICS

(CONT.)

FROM	TO	COND NO	CIRCUIT FUNCTION
TB1-K39	TB1-H42	AA 26	0 VDC OPTICS
TB1-K39	TB1-H39	TB 24	0 VDC OPTICS
TB1-K40	P08- 51	A 281Y	SCT SHAFT 1X RSVR S4
TB1-K40	J18-D5	CC235W	SCT SHAFT 1X RSVR S4
TB1-K41	P08- 50	A 281R	SCT SHAFT 1X RSVR S2
TB1-K41	J18-C5	CC235R	SCT SHAFT 1X RSVR S2
TB1-K42	SHLD A 90	A 90B	0 VDC OPTICS
TB1-K42	SHLD CC253	CC253B	0 VDC OPTICS
TB1-K42	TB1-H47	AA 27	0 VDC OPTICS
TB1-K42	TB1-H42	TB 25	0 VDC OPTICS
TB1-K43	J05- 67	A 90Y	TRUNNION CDU 1/2X RSVR S3
TB1-K43	J19-H1	CC253W	TRUNNION CDU 1/2X RSVR S3
TB1-K44	J05- 68	A 90R	TRUNNION CDU 1/2X RSVR S1
TB1-K44	J19-G1	CC253R	TRUNNION CDU 1/2X RSVR S1
TB1-K45	J04- 21	A 65Y	SHAFT CDU 1X RSVR P4
TB1-K45	J19-G3	CC266W	SHAFT CDU 1X RSVR P4
TB1-K46	J04- 7	A 65R	SHAFT CDU 1X RSVR P2
TB1-K46	J19-G4	CC266R	SHAFT CDU 1X RSVR P2
TB1-K47	SHLD A 65	A 65B	0 VDC OPTICS
TB1-K47	SHLD CC266	CC266B	0 VDC OPTICS
TB1-K47	TB1-H67	AA 28	0 VDC OPTICS
TB1-K47	TB1-H47	TB 26	0 VDC OPTICS
TB1-K48	J05- 31	A 86Y	TRUNNION CDU MOTOR PHASE 1
TB1-K48	J19-S1	CC257W	TRUNNION CDU MOTOR PHASE 1
TB1-K49	J05- 32	A 86R	TRUNNION CDU MOTOR PHASE 2
TB1-K49	J19-T1	CC257R	TRUNNION CDU MOTOR PHASE 2
TB1-K50	J05- 43	A 86G	0 VDC OPTICS
TB1-K50	P08- 1	A 267G	0 VDC OPTICS
TB1-K50	P11-G	A 519	0 VDC OPTICS
TB1-K50	TB1-H50	TB 28	0 VDC OPTICS
TB1-K51	P08- 2	A 267R	SCT TRUNNION MOTOR PHASE 2
TB1-K51	J19-T	CC260R	SCT TRUNNION MOTOR PHASE 2

(CONT.)

FROM	TO	COND NO	CIRCUIT FUNCTION
TB1-K52	P08- 3	A 267Y	SCT TRUNNION MOTOR PHASE 1
TB1-K52	J19-S3	CC260W	SCT TRUNNION MOTOR PHASE 1
TB1-K53	P11-G	A 518	0 VDC OPTICS
TB1-K53	J16-R5	CC178	0 VDC OPTICS
TB1-K53	TB1-H53	TB 29	0 VDC OPTICS
TB1-K54	P09- 58	A 364	SCT SHAFT TACH FEEDBACK BUFFERED
TB1-K54	J18-M6	CC216	SCT SHAFT TACH FEEDBACK BUFFERED
TB1-K55	P09- 57	A 363	SXT SHAFT TACH FEEDBACK BUFFERED
TB1-K55	J18-M4	CC215	SXT SHAFT TACH FEEDBACK BUFFERED
TB1-K56	P09- 74	A 378	SXT SHAFT MDA INPUT BUFFERED
TB1-K56	J18-M3	CC214	SXT SHAFT MDA INPUT BUFFERED
TB1-K57	P09- 37	A 350	SCT TRUNNION 1X ERROR SIG BUFFERED
TB1-K57	J19-M5	CC245	SCT TRUNNION 1X ERROR SIG BUFFERED
TB1-K58	P09- 72	A 376	PHOTOMETER PREAMP OUTPUT BUFFERED HI
TB1-K58	J20-B8	CC282	PHOTOMETER PREAMP OUTPUT BUFFERED HI
TB1-K59	J09-102	A 324Y	IMU TEMP CONT -5 DEG GAIN CHECK
TB1-K59	J17-B7	CC184W	IMU TEMP CONT -5 DEG GAIN CHECK
TB1-K60	J09- 86	A 324R	IRIG TEMP GAIN SWITCH NC
TB1-K60	J17-C8	CC184R	IRIG TEMP GAIN SWITCH NC
TB1-K61	J09- 89	A 324N	IRIG ZERO DEVIATION CHECK
TB1-K61	J17-B8	CC184L	IRIG ZERO DEVIATION CHECK
TB1-K62	J09- 85	A 324G	IRIG TEMP BRIDGE AMP PIN 6
TB1-K62	J17-C7	CC184K	IRIG TEMP BRIDGE AMP PIN 6
TB1-K63	P06-Z	A 242R	IRIG TEMP IND SENSOR HI
TB1-K63	J17-C6	CC198R	IRIG TEMP IND SENSOR HI
TB1-K64	P06-A*	A 242Y	IRIG TEMP IND SENSOR RET
TB1-K64	J17-C5	CC198W	IRIG TEMP IND SENSOR RET
TB1-K65	P05- 81	A 235Y	PHOTOMETER SIGNAL LO
TB1-K65	J20-B9	CC278W	PHOTOMETER SIGNAL LO
TB1-K66	P05- 80	A 235R	PHOTOMETER SIGNAL HI
TB1-K66	J20-A9	CC278R	PHOTOMETER SIGNAL HI
TB1-K67	SHLD A 235	A 235B	0 VDC OPTICS

(CONT.)

FROM	TO	COND NO	CIRCUIT FUNCTION	
TB1-K67	SHLD A 290	A 290B	0 VDC OPTICS	
TB1-K67	SHLD CC278	CC278B	0 VDC OPTICS	
TB1-K67	TB1-D76	A 586	0 VDC OPTICS	
TB1-K67	TB1-H67	TB 34	0 VDC OPTICS	
TB1-K68	J09- 8	A 290R	TRUNNION HAND CONTROLLER OUTPUT HI	
TB1-K68	J19-F9	CC249R	TRUNNION HAND CONTROLLER OUTPUT HI	
TB1-K69	J09- 22	A 290Y	TRUNNION HAND CONTROLLER OUTPUT LO	
TB1-K69	J19-F8	CC249W	TRUNNION HAND CONTROLLER OUTPUT LO	
TB1-K70	E 3	CC343	STRUCTURE GROUND	
TB1-K70	P13- 37	A 500	STRUCTURE GROUND	
TB1-K70	P12-L	A 553	STRUCTURE GROUND	
TB1-K70	TB1-H70	TB 37	STRUCTURE GROUND	
TB1-K71	TB1-K72	TB 39	+28 VDC MDV	
TB1-K71	P10-104	A 421	+28 VDC MDV	
TB1-K71	J10- 8	A 483	+28 VDC MDV	306
TB1-K71	J10- 10	A 489	+28 VDC MDV	327
TB1-K71	J20-N5	CC283	+28 VDC MDV	
TB1-K72	P01- 89	A 142	+28 VDC MDV	
TB1-K72	J09- 51	A 310	+28 VDC MDV	
TB1-K72	J20-M5	CC284	+28 VDC MDV	
TB1-K72	TB1-K71	TB 39	+28 VDC MDV	
TB1-K73	P06-C*	A 243Y	PRESSURE SENSOR +28 VDC LO	
TB1-K73	J20-B6	CC310W	PRESSURE SENSOR +28 VDC LO	
TB1-K74	P06-B*	A 243R	PRESSURE SENSOR +28 VDC HI	
TB1-K74	J20-A6	CC310R	PRESSURE SENSOR +28 VDC HI	
TB1-K75	P12-B	A 533	+28 VDC IMU BUSS B	
TB1-K75	P12-B	A 534	+28 VDC IMU BUSS B	
TB1-K75	P12-B	A 535	+28 VDC IMU BUSS B	
TB1-K75	J20-T2	CC297	+28 VDC IMU BUSS B	
TB1-K75	J20-R2	CC314	+28 VDC IMU BUSS B	
TB1-K76	P11-B	A 505	+28 VDC IMU BUSS A	
TB1-K76	P11-B	A 506	+88 VDC IMU BUSS A	

(CONT.)

FROM	TO	COND NO	CIRCUIT FUNCTION	
TB1-K76	P11-B	A 507	+28 VDC IMU BUSS A	
TB1-K76	J20-T1	CC295	+28 VDC IMU BUSS A	
TB1-K76	J20-R1	CC312	+28 VDC IMU BUSS A	
TB1-K77	P12-A	A 530	+28 VDC AGC BUSS B	
TB1-K77	J23- 64	A 560	+28 VDC AGC BUSS B	168
TB1-K77	J23- 65	A 561	+28 VDC AGC BUSS B	168
TB1-K77	J20-H3	CC288	+28 VDC AGC BUSS B	
TB1-K78	P11-A	A 502	+28 VDC AGC BUSS A	
TB1-K78	J23- 62	A 558	+28 VDC AGC BUSS A	167
TB1-K78	J23- 63	A 559	+28 VDC AGC BUSS A	167
TB1-K78	J20-H2	CC287	+28 VDC AGC BUSS A	

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SYM	ZONE	DESCRIPTION	DR	CHK	DATE	APPROVED

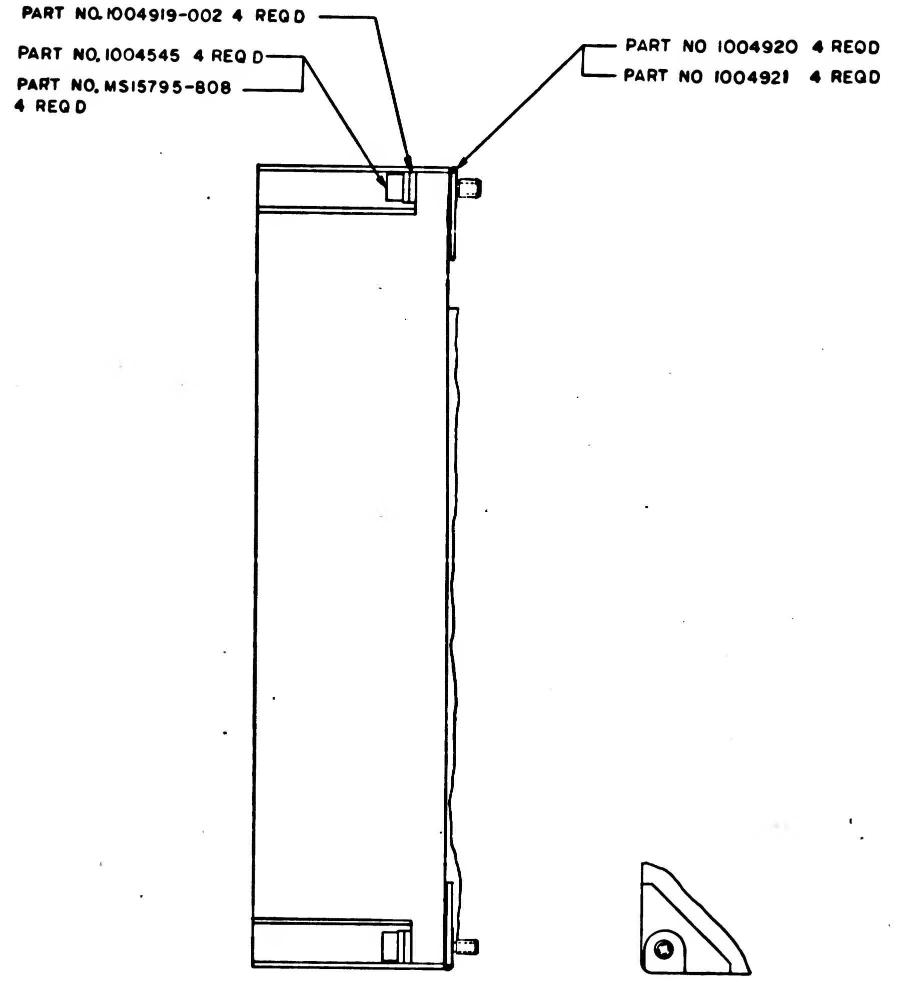

TABLE I	
PART NO.	MAKE FROM
1003563-051	1003563-031

NOTES:

1. MAKE FROM TABLE I
2. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
3. RE-IDENTIFY IN ACCORDANCE WITH R.I.B. NO. 0104117

QTY REQD	PART OR IDENTIFYING NO.	MATERIAL OR NOTES	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY	USED ON

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
CAPACITOR VALUES ARE IN μf
RESISTOR VALUES ARE IN OHMS
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING
MATERIAL

MIT
INSTRUMENTATION LAB
CAMBRIDGE, MASS.

DRAWN John P. Giordano 17 MARCH 1967
CHECKED E Urban 6 APR 67
APPROVED
APPROVED Eldon C. Hall 5 May 67
APPROVED MIT 5/11
APPROVED MSC 5/8
DATE

MANNED SPACECRAFT CENTER
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INSTRUCTION DRAWING
FOR R.I.B. NO. 0104117
AGC KEYBOARD & DISPLAY
MAIN PANEL

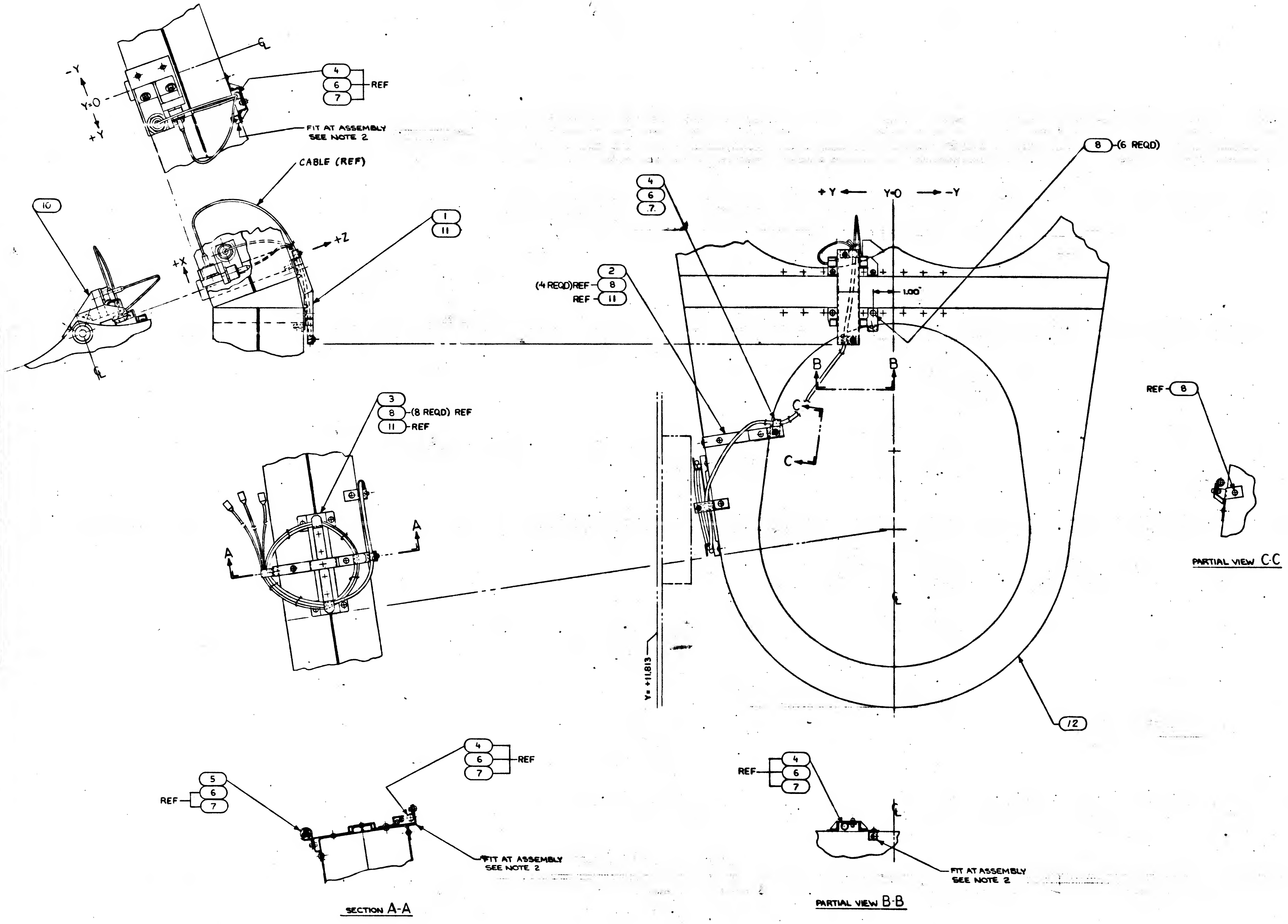
CODE IDENT NO. 80230
SIZE D
DRAWING NO. 1023602
SCALE 1/1
SHEET 1 OF 1

1025713 | A

REVISIONS 27395						
SYM	ZONE	DESCRIPTION	DR	CHK	DATE	APPROVED
A		REVISED PER TDRR 27843	R.G.			

NOTES

1. INTERPRET DRAWING IN ACCORDANCE WITH MIL-D-70327.
2. FIT AT ASSEMBLY ALL ANGLE GUSSETS INDICATED AND AS DESCRIBED ON ITEMS 1 AND 3. PROPER FIT-UP MUST ENSURE .002 TO .007 CLEARANCE FOR EACH ADHESIVE JOINT.
3. BOND AND RIVET ITEMS 1, 2, AND 3 IN NOT MORE THAN THREE STAGES USING ITEMS 8 AND 11. ALL ADHESIVE JOINTS TO BE CONTROLLED TO .002 TO .007 ADHESIVE THICKNESS. PROCESS PER ND1002254.
4. ALL RIVET HOLES TO BE .143/.146 DIA THRU. AFTER BRACKETS ARE PROPERLY ALIGNED, TRANSFER DRILL HOLES FROM HOLES IN BRACKETS. RIVET STEMS SHALL NOT PROTRUDE BEYOND RIVET HEADS MORE THAN .03 MAX.
~~5. TWIST AND LACE CONDUCTORS (ITEM 9) IN ACCORDANCE WITH ND1002032.~~
5. ACCELEROMETER MOUNTING SURFACES OF ITEM 10 TO BE PERPENDICULAR TO THEIR CORESPONDING NAVIGATION BASE AXES TO WITHIN 1°.



1	2899981		NAVIGATION BASE, INSEP. ASSY	12
AR	1010877		ADHESIVE (EC-2186)	11
1	1025714		ACCELEROMETER BRACKET, ASSY OF	10
~~3~~			~~ACCELEROMETER CABLE~~	9
18	1010868-2		RIVET, BLIND-UNIVERSAL HEAD	8
5	NAS1352C04-4		SCREW, CAP, HEX SOC HD	7
5	1011918-1		WASHER, CABLE CLAMP	6
1	1000220-19		CLAMP, CABLE	5
4	1000220-5		CLAMP, CABLE	4
1	1025715		CABLE SUPPORT BRACKET, ASSY OF	3
1	1025718		CLAMP MTG PLATE & NUT, ASSY OF	2
1	1025720		CABLE MTG BRACKET, ASSY OF	1
QTY REQD	PART OR IDENTIFYING NO.	MATERIAL OR NOTES	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

2899982-021	
NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
CAPACITOR VALUES ARE IN µf
RESISTOR VALUES ARE IN OHMS
TOLERANCES ON
FRACTIONS ± ~ DECIMALS ± .02 ANGLES ± ~
DO NOT SCALE THIS DRAWING
MATERIAL ~

MIT
INSTRUMENTATION LAB
CAMBRIDGE, MASS.

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

DRAWN		1-5-66
CHECKED	H.E.	3-14-66
APPROVED	R.	
APPROVED		
APPROVED MIT	W.	
APPROVED MSC		DATE

NAVIGATION BASE, INSEPERABLE ASSEMBLY (BLOCK II)

CODE IDENT NO.	SIZE	DRAWING NO.
80230	E	1025713
SCALE 1/2		SHEET 1 OF 1

1025713 A

MASTER

SYM	ZONE	DESCRIPTION	DR	CHK	DATE	APPROVED
A		REVISED PER TDRR 27843	R.G. 4/21/66			WK
B		REVISED PER TDRR 29305	6-2-66			

REVISIONS 27395

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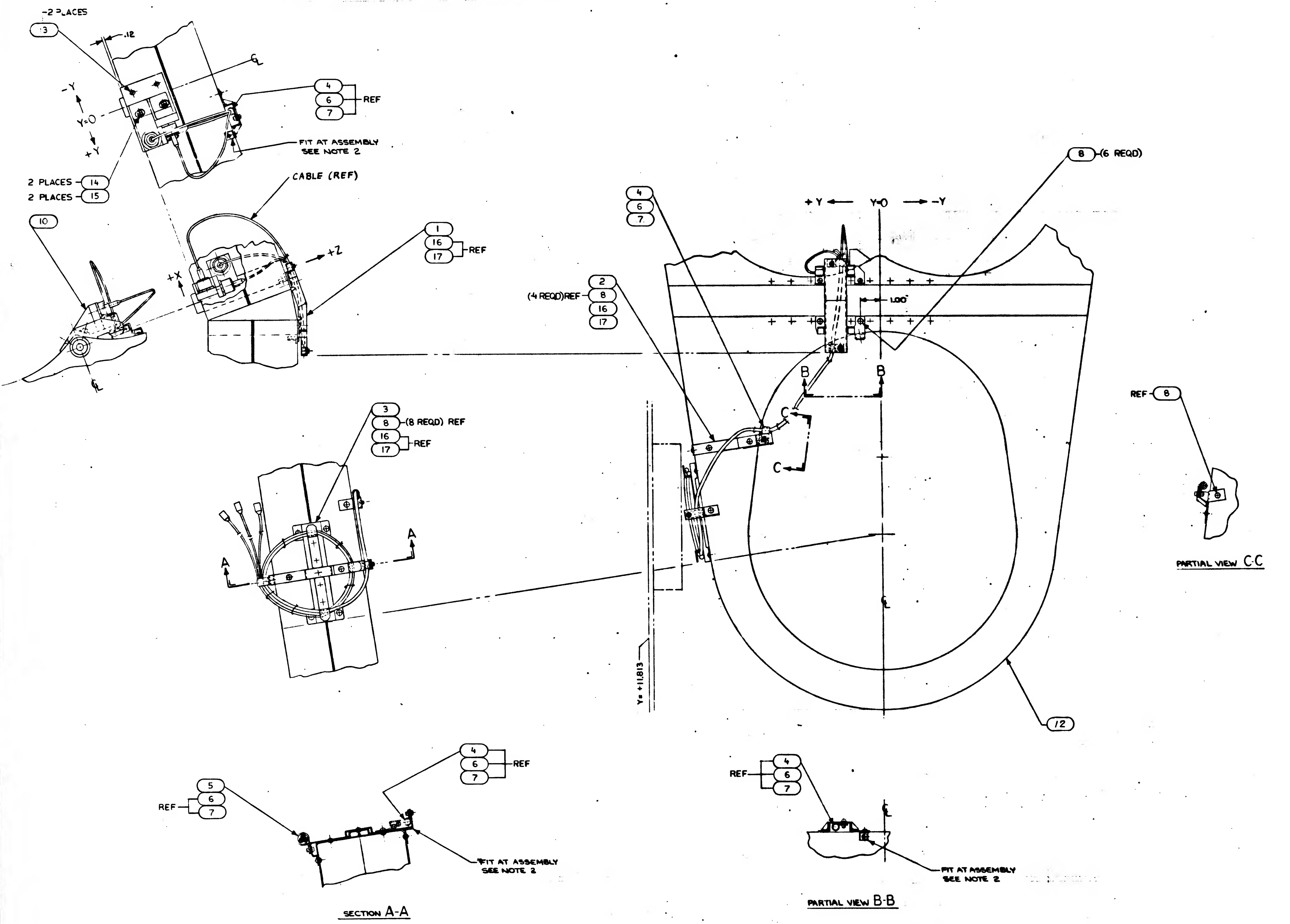
NOTES

1. INTERPRET DRAWING IN ACCORDANCE WITH MIL-D-70327.
2. FIT AT ASSEMBLY ALL ANGLE GUSSETS INDICATED AND AS DESCRIBED ON ITEMS 1 AND 3. PROPER FIT-UP MUST ENSURE .002 TO .007 CLEARANCE FOR EACH ADHESIVE JOINT.
3. BOND ITEMS 1, 2, 3, AND 10 TO ITEM 12 AND SECURE WITH SPECIFIED HARDWARE. USE ADHESIVE ITEMS 16 AND 17 PER ND 1002187, TYPE I WITH 150° F TEMPERATURE CURE.
4. ALL RIVET HOLES TO BE .143/.146 DIA THRU. AFTER BRACKETS ARE PROPERLY ALIGNED, TRANSFER DRILL HOLES FROM HOLES IN BRACKETS. RIVET STEMS SHALL NOT PROTRUDE BEYOND RIVET HEADS MORE THAN .03 MAX.

~~5. TWIST AND LACE CONDUCTORS (ITEM 9) IN ACCORDANCE WITH ND1002032.~~

5. ACCELEROMETER MOUNTING SURFACES OF ITEM 10 TO BE PERPENDICULAR TO THEIR CORESPONDING NAVIGATION BASE AXES TO WITHIN 1°
6. LOCATE ITEM 10 TO DIMENSION SHOWN. TRANSFER DRILL AND TAP INTO 2899981, USING DRILL NO. 35 (.110) AND NO. 6-32 UNC-3B TAP × .38 DEEP.
7. CHEMICAL FINISH ITEMS 1, 2, AND 3 PER MIL-C-5541 AFTER FITUP AND LESS THAN 8 HOURS PRIOR TO BONDING.
8. ANODIZE ITEM 10 PER MIL-A-8625, TYPE I AFTER FITUP AND LESS THAN 8 HOURS PRIOR TO BONDING.



QTY REQD	PART OR IDENTIFYING NO.	MATERIAL OR NOTES	NOMENCLATURE OR DESCRIPTION	FIND NO.
AR	1010661		EPOXY RESIN	17
AR	1010679		ADHESIVE ACTIVATOR	16
2	MS15795-805		WASHER, FLAT	15
2	NAS1352C06-6		SCREW, CAP, HEX SOC. (1897CH-019)	14
2	MS35249-35		SCREW, FLAT HD. 82°	13
1	2899981		NAVIGATION BASE, INSEP. ASSY	12
				11
1	1025721		BRACKET, MOUNTING, ACCEL	10
~~3~~			~~ACCELEROMETER CABLE~~	9
18	1010868-2		RIVET, BLIND-UNIVERSAL HEAD	8
5	NAS1352C04-4		SCREW, CAP, HEX SOC HD	7
5	1011918-1		WASHER, CABLE CLAMP	6
1	1000220-19		CLAMP, CABLE	5
4	1000220-5		CLAMP, CABLE	4
1	1025715		CABLE SUPPORT BRACKET, ASSY OF	3
1	1025718		CLAMP MTG PLATE & NUT, ASSY OF	2
1	1025720		CABLE MTG BRACKET, ASSY OF	

LIST OF MATERIALS

NEXT ASSY	USED ON
2899982-011	

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
CAPACITOR VALUES ARE IN µf
RESISTOR VALUES ARE IN OHMS
TOLERANCES ON
FRACTIONS ± ~ DECIMALS ± .02 ANGLES ± ~
DO NOT SCALE THIS DRAWING

MATERIAL

MIT
INSTRUMENTATION LAB
CAMBRIDGE, MASS.

DRAWN 1-5-66
CHECKED H.E. 3-14-66
APPROVED R. 3/22/66
APPROVED
APPROVED MIT W. Kupfer
APPROVED MSC
DATE

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

NAVIGATION BASE, INSEPERABLE ASSEMBLY (BLOCK II)

CODE IDENT NO. 80230
SIZE E
DRAWING NO. 1025713
SCALE 1/2
SHEET 1 OF 1

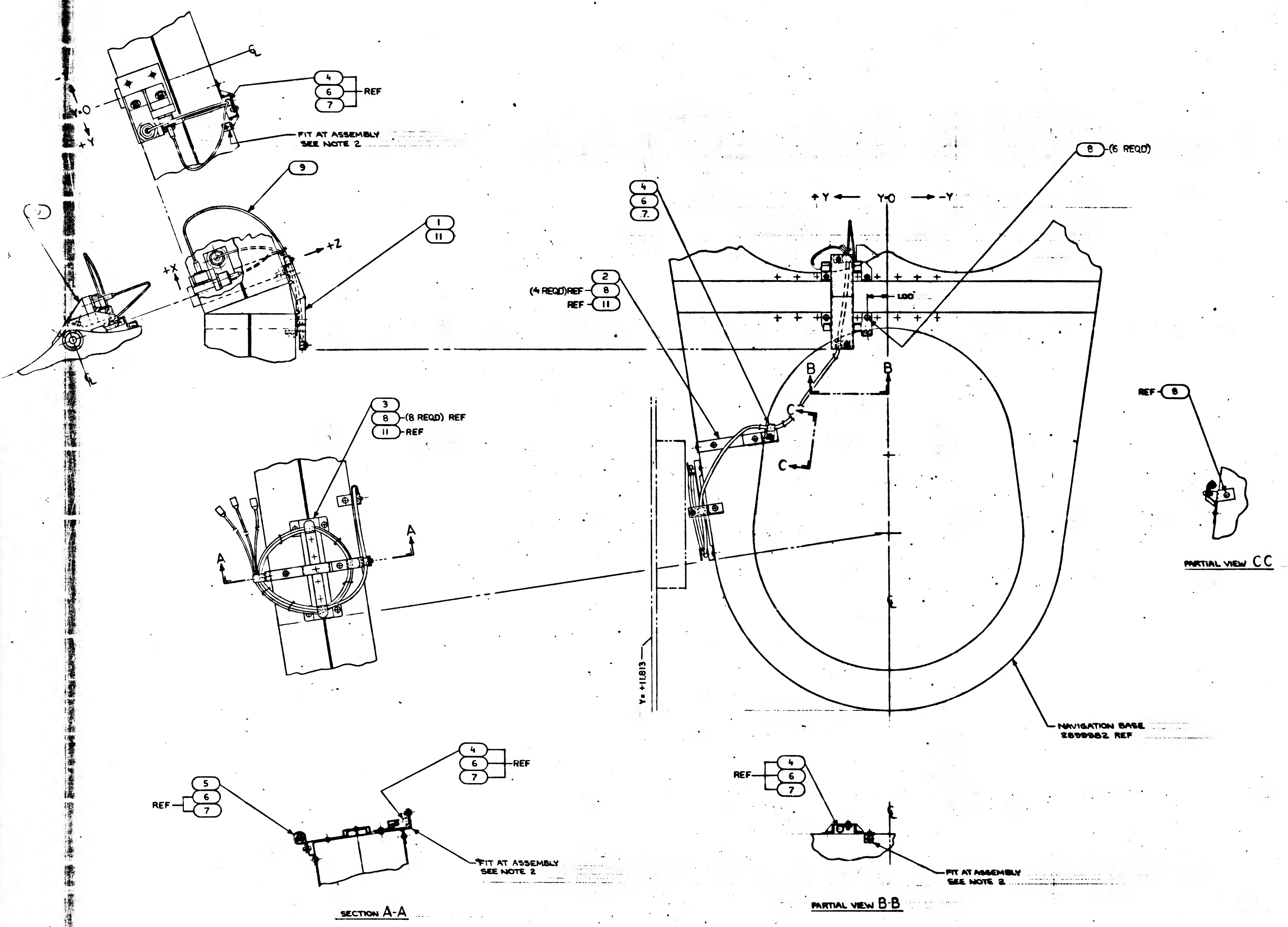
MASTER

1025713

SYM	ZONE	DESCRIPTION	DR	CHK	DATE	APPROVED
		REVISIONS 27395				

NOTES

1. INTERPRET DRAWINGS IN ACCORDANCE WITH MIL-D-70327.
2. FIT AT ASSEMBLY ALL ANGLE GUSSETS INDICATED AND AS DESCRIBED ON ITEMS 1 AND 3. PROPER FIT-UP MUST ENSURE .002 TO .007 CLEARANCE FOR EACH ADHESIVE JOINT.
3. BOND AND RIVET ITEMS 1, 2, AND 3 IN NOT MORE THAN THREE STAGES USING ITEMS 8 AND 11. ALL ADHESIVE JOINTS TO BE CONTROLLED TO .002 TO .007 ADHESIVE THICKNESS. PROCESS PER ND1002254.
4. ALL RIVET HOLES TO BE .143/.146 DIA THRU. AFTER BRACKETS ARE PROPERLY ALIGNED, TRANSFER DRILL HOLES FROM HOLES IN BRACKETS. RIVET STEMS SHALL NOT PROTRUDE BEYOND RIVET HEADS MORE THAN .03 MAX.
5. TWIST AND LACE CONDUCTORS (ITEM 9) IN ACCORDANCE WITH ND1002032.



QTY REQD	PART OR IDENTIFYING NO.	MATERIAL OR NOTES	NOMENCLATURE OR DESCRIPTION	FIND NO.
AR	1010877		ADHESIVE (EC-2186)	11
1	1025714		ACCELEROMETER BRACKET, ASSY OF	10
3	~ ~ ~ ~		ACCELEROMETER CABLE	9
18	1010868-2		RIVET, BLIND-UNIVERSAL HEAD	8
5	NAS1352C04-4		SCREW, CAP, HEX SOC HD	7
5	1011918-1		WASHER, CABLE CLAMP	6
1	1000220-13		CLAMP, CABLE	5
4	1000220-5		CLAMP, CABLE	4
1	1025715		CABLE SUPPORT BRACKET, ASSY OF	3
1	1025718		CLAMP MTG PLATE & NUT, ASSY OF	2
1	1025720		CABLE MTG BRACKET, ASSY OF	

LIST OF MATERIALS

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
CAPACITOR VALUES ARE IN μf
RESISTOR VALUES ARE IN OHMS
TOLERANCES ON
FRACTIONS ± ~ DECIMALS ± .02 ANGLES ± ~
DO NOT SCALE THIS DRAWING
MATERIAL

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CAMBRIDGE, MASS.

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

DRAWN F. DeRiggs 1-5-66
CHECKED H.E. Cressy 3-14-66
APPROVED R. G. Dean 3/22/66
APPROVED
APPROVED MIT W. Kupfer 3/28/66
APPROVED MSC
DATE

ACCELEROMETER CABLE
ROUTING, ASSEMBLY OF
(NAV BASE)

CODE IDENT NO. 80230
SIZE E
DRAWING NO. 1025713
SCALE 1/2
SHEET 1 OF 1

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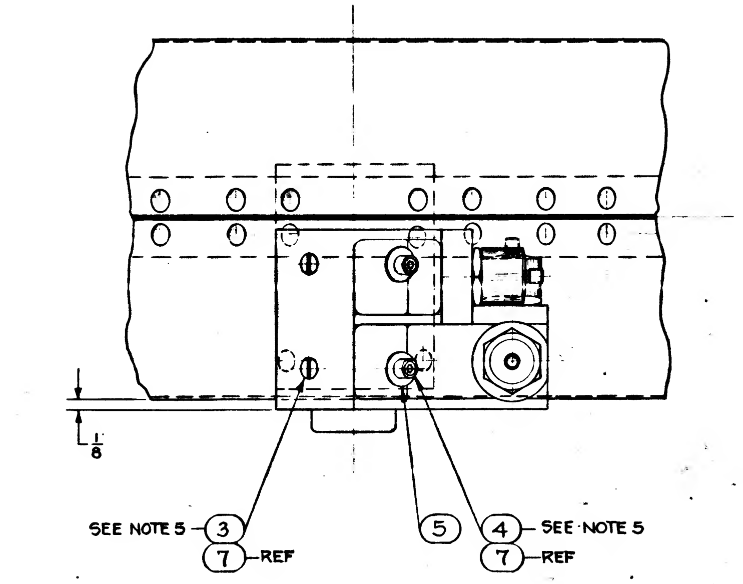
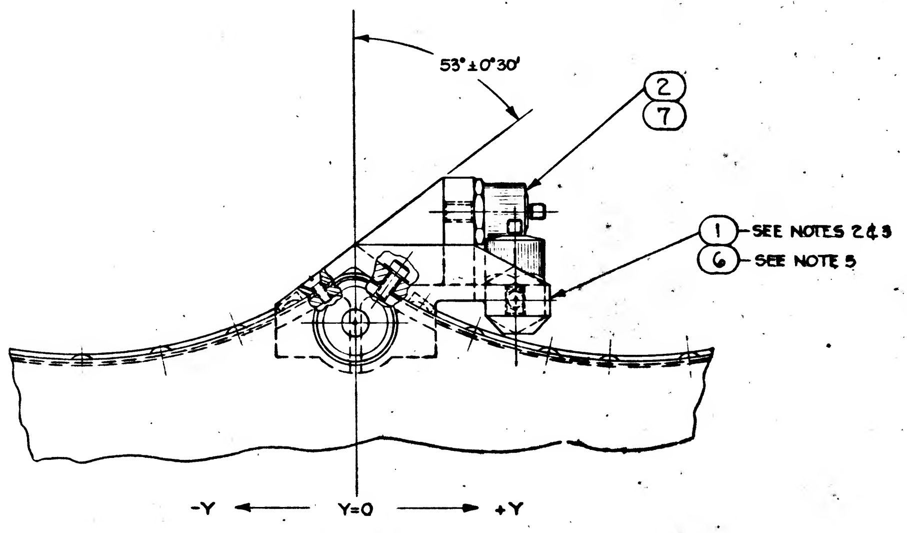
REVISIONS 27395

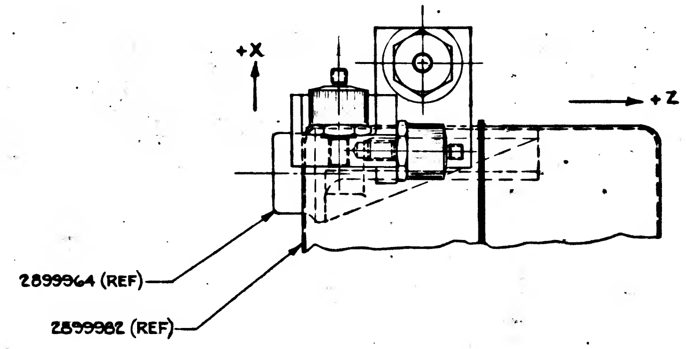
SYM	ZONE	DESCRIPTION	DR	CHK	DATE	APPROVED



NOTES:

1. INTERPRET DWG. IN ACCORDANCE WITH MIL-D-70327.
2. LOCATE ITEM 1 TO DIMENSIONS SHOWN. TRANSFER DRILL AND TAP INTO 2899964 USING DR NO. 35(.110) THRU AND NO.6-32UNC-3B TAP THRU.
3. APPLY ITEM 6 TO MOUNTING SURFACE OF ITEM 1 AS REQ'D. ADHESIVE THICKNESS TO BE CONTROLLED TO .002 TO .007. PER ND1002254.
4. ANODIZE ITEM 1 AFTER FITUP AND LESS THAN 8 HOURS PRIOR TO BONDING. ANODIZE PER MIL-A-8625, TYPE I (ES-385).
5. AFTER ANODIZING APPLY ITEM 7 TO THREADS OF ITEMS 2, 3 AND 4 PRIOR TO INSTALLATION.





QTY REQD	PART OR IDENTIFYING NO.	MATERIAL OR NOTES	NOMENCLATURE OR DESCRIPTION	FIND NO.
AR	MIL-S-40083(Ord) CLASS 30		LOCKING COMPOUND	7
AR	1010877		ADHESIVE (EC-2186)	6
2	MS15795-805		WASHER, FLAT	5
2	NAS1352C06-6		SCREW, CAP, HEX SOC.	4
2	MS35249-35		SCREW, FLAT HD. 82°	3
3	ME106-0015-1001		ACCELEROMETER	2
1	1025721		BRACKET, MOUNTING, ACCEL.	1

LIST OF MATERIALS

NEXT ASSY	USED ON

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
CAPACITOR VALUES ARE IN µf
RESISTOR VALUES ARE IN OHMS
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING

MATERIAL

MIT
INSTRUMENTATION LAB
CAMBRIDGE, MASS.

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

		DATE
DRAWN	A.C.WILLIAMS	1-18-66
CHECKED	H.C.Penney	3-14-66
APPROVED	R.W. Brand	3/22/66
APPROVED		
APPROVED MIT	W. Taylor	2/16/66
APPROVED MSC	A. C. METZGER	

ACCELEROMETER, BRACKET ASS'Y OF

CODE IDENT NO.	SIZE	DRAWING NO.
80230	D	1025714

SCALE: 1/1

SHEET 1 OF 1

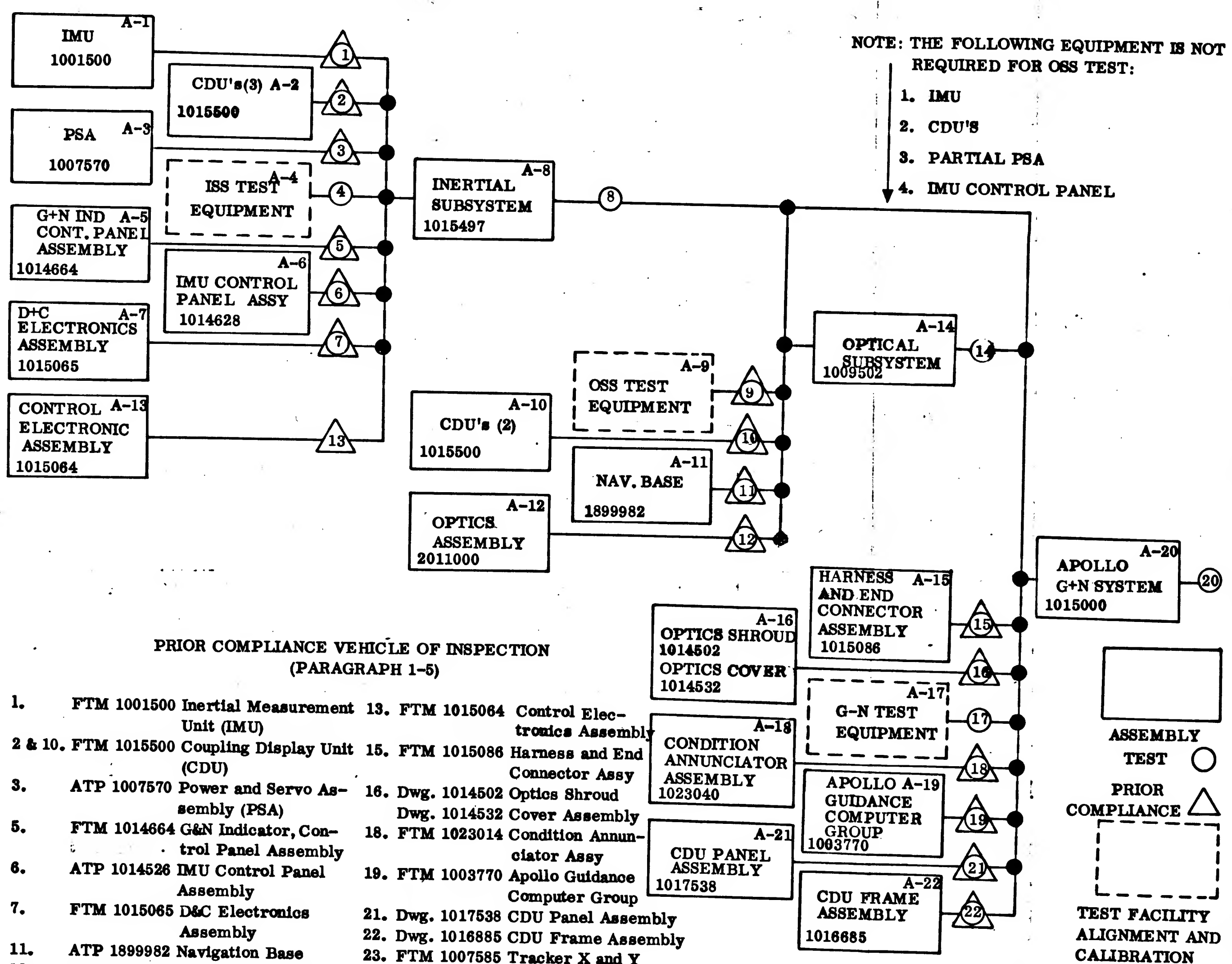
Apollo G&N Specification
FTM-1026000 D
Date
Class A Release
TDRR 21991

FINAL TEST METHOD
FOR
THE APOLLO GUIDANCE AND NAVIGATION SYSTEM
P/N 1015000 (BLOCK I)
Series 100

Record of Revisions

Date	Revision Letter	TDRR No.	Pages Revised	Approval	
				AC	NASA
3/10/66	A	27030	5, 8, 9, 10-21. Now 21	WK	TM
			pages, was 22.		
8/4/66	B	30405	3	EA	--
11/17/66	C	31965	5	EA	--
12/8/66	D	32260	5, 11, 12, 15, 19, 20	EA	--

This specification consists of page i to v and 1 to 21 inclusive.



NOTE: THE FOLLOWING EQUIPMENT IS NOT REQUIRED FOR OSS TEST:

1. IMU
2. CDU'S
3. PARTIAL PSA
4. IMU CONTROL PANEL

PRIOR COMPLIANCE VEHICLE OF INSPECTION
(PARAGRAPH 1-5)

1. FTM 1001500 Inertial Measurement Unit (IMU)
2 & 10. FTM 1015500 Coupling Display Unit (CDU)
3. ATP 1007570 Power and Servo Assembly (PSA)
5. FTM 1014664 G&N Indicator, Control Panel Assembly
6. ATP 1014526 IMU Control Panel Assembly
7. FTM 1015065 D&C Electronics Assembly
11. ATP 1899982 Navigation Base
12. PS 2011000 Optics Assembly
13. FTM 1015064 Control Electronics Assembly
15. FTM 1015086 Harness and End Connector Assy
16. Dwg. 1014502 Optics Shroud
Dwg. 1014532 Cover Assembly
18. FTM 1023014 Condition Annunciator Assy
19. FTM 1003770 Apollo Guidance Computer Group
21. Dwg. 1017538 CDU Panel Assembly
22. Dwg. 1016885 CDU Frame Assembly
23. FTM 1007585 Tracker X and Y Assembly

TEST OR ASSY NO.	JDC'S REQUIRED
4	JDC 00010 JDC 00011 JDC 00012
A-8	JDC 00009 JDC 00013 JDC 15014 JDC 00017 JDC 00018
8	Post Vibration (Subsequent to Performing JDC 00245) JDC 00245 JDC 15039 JDC 15053 JDC 15057 JDC 00059 JDC 00060 JDC 15161 JDC 15162 JDC 15163 JDC 15164 JDC 15165 JDC 15166 JDC 15167 JDC 15168 JDC 15169 JDC 15170 JDC 15179 JDC 00206 JDC 15236 JDC 15237 JDC 15239 JDC 15240 JDC 15242 JDC 15243 JDC 00230 [illegible] [illegible] [illegible] [illegible] [illegible] [illegible]
9	JDC 10181 JDC 10739
A-14	JDC 10180 JDC 10182 JDC 10731

TEST OR ASSY NO.	JDC'S REQUIRED
A-14	JDC 10738 JDC 10741 JDC 10732 JDC 10733 JDC 10185 JDC 10734
14	JDC 10702 JDC 10703 JDC 10704 JDC 10705 JDC 10709 JDC 10710
A-20	JDC 10002 JDC 10001 JDC 10004 JDC 10007
17	JDC 10003
20	JDC 10009 JDC 10033 JDC 10034 JDC 10035 JDC 10036 JDC 10038 JDC 10039 JDC 10040 JDC 10041 JDC 10042 JDC 10043 JDC 10084 JDC 10085 JDC 10086 JDC 10087 JDC 10088 JDC 10089 JDC 10091 JDC 10092 JDC 10093 JDC 10094 JDC 10001 JDC 10090

Figure 1. G & N System Inspection Flowgram

The rotary axis and tilt axis calibrations shall be accomplished at three month intervals, in accordance with the following JDC's.

JDC 19728	**Rotary Table Tilt and Rotary Axis Calibration**
JDC 19729	**Theodolite and Ultradex Procedures for Rotary Table Rotary Axis Calibration for OSS Testing**
[illegible]	[illegible] Procedure [illegible] Rotary Table Rotary Axis [illegible]

3-2.1.2 OPERATIONAL TESTS. The Apollo G&N Inertial Subsystem shall be examined and tested per the following JDC's subsequent to performing JDC 00245. (Post Vibration). The sequence and extent of testing shall be as specified in ATP 1015497.

JDC	DESCRIPTION
00245	Visual and Mechanical Test - IMU
15039	Power Supply Tests, (Power Supply Tests)
15057	Temperature Control Tests (Standby and Operate Temperature Control Test)
15053	Temperature Control Tests (Temperature Control) and Circuitry Test)
00059	Temperature Control Tests, (High Power Conditioner Test)
15161	PIPA Alignment Test (Test to determine E_{MGR}, α_{XZ}, $\theta_{H_{OGA}}$, E_{FZ}, α_{BX}, and a_{BX})
15162	PIPA Alignment Test (Zero Adjustment of Middle Resolver).
15163	PIPA Alignment Test (Test to determine α_{BZ}, a_{BZ}, α_{ZX}, E_{MGA} and E_{IGA}).
15164	PIPA Alignment Test (Test to determine E_{IGR}, E_{FY}, and E_{FLY})
15165	PIPA Alignment Test (Zero Adjustment of Inner Gimbal Resolver).
15166	PIPA Alignment Test (Test to determine α_{XY})
15167	PIPA Alignment Test (Test to determine α_{BY}, a_{BY}, and α_{YZ})

JDC	DESCRIPTION
15168	PIPA Alignment Test (Test to determine E_{OGR}).
15169	PIPA Alignment Test (ZERO Adjustment of Outer Gimbal Resolver).
15170	PIPA Alignment Test (Test to determine α_{YX}).
15179	IRIG Alignment Tests
00206	PIPA Performance Test (Test to determine effects of AGE Voltage Variations).
15236	X IRIG Performance Test (Test to determine BDX and ADSRAX).
15237	X IRIG Performance Test (Test to determine BDX and ADIAX)
15239	Y IRIG Performance Test (Test to determine BDY and ADSRAY).
15240	Y IRIG Performance Test (Test to determine BDY and ADIAY)
15242	Z IRIG Performance Test (Test to determine BDZ and ADSRAZ)
15243	Z IRIG Performance Test (Test to determine BDZ and ADIAZ).
00230	IRIG Performance Test (Hi/Lo Voltage).
00060	Temperature Control Tests (Low Power Conditioner Test)

c. Target No. 2 shall be positioned laterally so that the target optical centerline is 7.05±0.05 inches to the west of the optical centerline of Target No. 1 measured horizontally in the plane of the fixture navigation base mounting pads.

d. Target No. 2 shall be positioned in elevation so that the target optical centerline is within ±0.10 inch of the optical centerline of Target No. 1 measured vertically in the plane of the fixture navigation base mounting pads.

3-3.1.1.7 Alignment Procedures

a. The Optical Target Alignment and Rotary Table Axis Calibration shall be conducted in accordance with the following JDC's.

JDC 10181	Alignment of OSS Optical Targets
JDC 10739	Calibration of Alignment Mirror Assembly

3-3.1.2 OPERATIONAL TESTS. The APOLLO G&N Optical Subsystem shall be examined and tested per the following JDC's. The sequence and extent of testing shall be as specified in ATP1009502.

JDC 10702	Power Check
JDC 10703	Optics-Nav. Base Alignment Check
JDC 10704	SXT Shaft Accuracy and Limits Test
JDC 10705	SCT Shaft Accuracy Test
JDC 10709	SXT Trunnion Accuracy and Limits Test
JDC 10710	SCT Trunnion Accuracy Test

3-3.1.3 NONCONFORMING UNITS. The failure of the Optical Subsystem to pass any examination or test of this section will automatically classify the unit as nonconforming. When nonconforming units are corrected by the contractor the unit shall be reinspected. The reinspection of a nonconforming unit may be limited to the test or examination which defined the nonconformance, or when so directed by the cognizant agency, a complete reexamination and retest of the unit may be required. Nonconforming units which have not been corrected will be considered for acceptance only upon formal application by the contractor to the cognizant agency.

DATA SHEET	DESCRIPTION
10715	Shaft Servo Loop Test
10716	DAC Sensitivity Test
10717	DAC Drift Test
10732	Installation of Shaft Accuracy Tester Base Assembly
10733	Installation of Shaft Accuracy Tester Rotary Table
10739	Calibration of Alignment Mirror Assembly
15039*	Power Supply Tests (Power Supply Test)
15053*	Temperature Control Tests (Temperature Control and Circuitry Test)
15057	Temperature Control Tests (Standby and Operate Temperature Control Test)
15070	PIPA Loop Tests (Accelerometer Fail Detector Test)
15073	Inertial Subsystem AGC Moding Interface Tests
15079	Stabilization Loop Tests (IMU Fail Detector Tests)
15097	CDU Loop Tests (CDU Fail Detector Tests)
15099	CDU Loop Tests (Ambiguity Check in the Fine Align Mode)
15116	Subsystem Mode Test (Turnon Test)
15107	Subsystem Mode Tests (Zero Encoder Test)
15108	Subsystem Mode Tests (Coarse Align Test)
15109	Subsystem Mode Tests (CDU Manual Test)
15111	Subsystem Mode Tests (Fine Align Test)
15112	Subsystem Mode Tests (Attitude Control Tests)
15161*	PIPA Alignment Test (Test to determine ϵ_{MGR}, α_{XZ}, a_{HOGA}
15162	PIPA Alignment Test (Zero Adjustment of Middle Gimbal Resolver)
15163*	PIPA Alignment Test (Test to determine α_{BZ}, a_{BZ}, α_{ZX}, ϵ_{MGA}, and ϵ_{IGA})
15164*	PIPA Alignment Test (Test to determine ϵ_{IGR}, ϵ_{FY}, and ϵ_{FLY})
15165	PIPA Alignment Test (Adjustment of the Inner Gimbal Resolver)
15166*	PIPA Alignment Test (Test to determine α_{XY})
15167	PIPA Alignment Test (Test to determine α_{BY}, a_{BY}, and α_{YZ})
15168	PIPA Alignment Test (Test to determine ϵ_{OGR})
15169*	PIPA Alignment Test (Zero Adjustment of the Outer Gimbal Resolver)
15170*	PIPA Alignment Test (Test to determine α_{VX})
15179*	IRIG Alignment Tests (Part 2. Measuring $_{XY}$ by rotation about the X IRIG Output Axis)
15182*	X IRIG Alignment Test (Part 3. Measuring $_{XZ}$ by rotation about the X IRIG Spin Reference Axis)
15[illegible]4*	Y IRIG Alignment Test (Part 2. Measuring $_{YZ}$ by rotation about the Y IRIG Output Axis)

DATA SHEET	DESCRIPTION
15201*	X PIPA Scale Factor Performance (Test to determine $SF(A)_x$ and a_{sx})
15203*	Y PIPA Scale Factor Performance (Test to determine $SF(A)_y$ and a_{sy})
15205*	Z PIPA Scale Factor Performance (Test to determine $SF(A)_z$ and a_{sz})
15236*	X IRIG Performance Test (Test to determine BDX and ADSRAX)
15237*	X IRIG Performance Test (Test to determine BDX and ADIAX)
15239*	Y IRIG Performance Test (Test to determine BDY and ADSRAY)
15240*	Y IRIG Performance Test (Test to determine BDY and ADIAY)
15242*	Z IRIG Performance Test (Test to determine BDZ and ADSRAZ)
15243*	Z IRIG Performance Test (Test to determine BDZ and ADIAZ)

*Date sheets specified as inspection data in applicable paragraphs of this document.

NOTICE – WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REVISIONS TDRR 28704

SYM	ZONE	DESCRIPTION	DR	CHK	DATE	APPROVED

QTY	K START NO. AND REVISION	PROCESS SPEC. AND / OR OCP*	TITLE	EFF.
2	F0111-K00019-00		G & N POLARITY TEST	SC011 GN017

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. MATERIAL: ALUMINIZED MYLAR TAPE, 1.000 $\pm.003$ WIDTH, 3.500 $\pm.003$ MILS THICK
3. * DENOTES OPERATIONAL CHECKOUT PROCEDURE

MASTER DOCUMENTATION LOCATED AT MIT/IL/STG

MASTER

NEXT ASSY	USED ON

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
CAPACITOR VALUES ARE IN μf
RESISTOR VALUES ARE IN OHMS
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING

MATERIAL
SEE NOTE 2

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

MIT
INSTRUMENTATION LAB
CAMBRIDGE, MASS.

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

DRAWN L. J. Berkeley 1/19/66
CHECKED
APPROVED
APPROVED
APPROVED MIT 10 May 66
APPROVED MSC 5/11/66
DATE

K START TAPE ASSEMBLY

CODE IDENT NO. 80230
SIZE C
DRAWING NO. 1026011
SCALE —
SHEET 1 OF 1

1026011

NOTICE — WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REVISIONS TDRR 28702

SYM	ZONE	DESCRIPTION	DR	CHK	DATE	APPROVED
A		REVISED PER TDRR 29913	LTB			

QTY	K START NO. AND REVISION	PROCESS SPEC. AND / OR OCP*	TITLE	EFF.
2	F0111-K00012-01	——	AGC ERASABLE TAPE MEMORY ZEROING	SC011 GN017

MASTER DOCUMENTATION LOCATED AT MIT / IL / STG

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. MATERIAL: ALUMINIZED MYLAR TAPE, 1.000 ±.003 WIDTH, 3.500 ±.003 MILS THICK
3. * DENOTES OPERATIONAL CHECKOUT PROCEDURE

MASTER

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
CAPACITOR VALUES ARE IN µf
RESISTOR VALUES ARE IN OHMS
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING

MATERIAL
SEE NOTE 2

MIT
INSTRUMENTATION LAB
CAMBRIDGE, MASS.

DRAWN L. J. Bakaley 1/19/66
CHECKED
APPROVED
APPROVED
APPROVED MIT 11 May 66
APPROVED MSC 5/11/66
DATE

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

K START TAPE ASSEMBLY

CODE IDENT NO. 80230
SIZE C
DRAWING NO. 1026012
SCALE ——
SHEET 1 OF 1

NOTICE – WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REVISIONS TDRR 28702

SYM	ZONE	DESCRIPTION	DR	CHK	DATE	APPROVED

QTY	K START NO. AND REVISION	PROCESS SPEC. AND / OR OCP*	TITLE	EFF.
2	F0111-K00012-00	—	AGC ERASABLE TAPE MEMORY ZEROING	SC011 GN017

MASTER DOCUMENTATION LOCATED AT MIT / IL / STG

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. MATERIAL: ALUMINIZED MYLAR TAPE, 1.000 ±.003 WIDTH, 3.500 ±.003 MILS THICK
3. * DENOTES OPERATIONAL CHECKOUT PROCEDURE

MASTER

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
CAPACITOR VALUES ARE IN µf
RESISTOR VALUES ARE IN OHMS
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING

MATERIAL
SEE NOTE 2

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

MIT
INSTRUMENTATION LAB
CAMBRIDGE, MASS.

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

DRAWN L. J. Bakeley 1/19/66
CHECKED
APPROVED
APPROVED
APPROVED MIT 11 May 66
APPROVED MSC 5/11/66
DATE

K START TAPE ASSEMBLY

CODE IDENT NO. 80230
SIZE C
DRAWING NO. 1026012
SCALE —
SHEET 1 OF 1

1026012

NOTICE – WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REVISIONS 26853

SYM	ZONE	DESCRIPTION	DR	CHK	DATE	APPROVED
A		REVISED PER TDRR 28571			5-24-66	

QTY	K START NO. AND REVISION	PROCESS SPEC. AND / OR OCP*	TITLE	EFF.
2	N011-K00023-01	06504	GYRO INTEG & MISSION PROFILE	SC011 GN017

DOCUMENT LOCATED AT MIT IL STG

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. MATERIAL: ALUMINIZED MYLAR TAPE, 1.000 ±.003 WIDTH, 3.500 ±.003 MILS THICK
3. * DENOTES OPERATIONAL CHECKOUT PROCEDURE

MASTER

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY	USED ON

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
CAPACITOR VALUES ARE IN µf
RESISTOR VALUES ARE IN OHMS
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING

MATERIAL
SEE NOTE 2

MIT
INSTRUMENTATION LAB
CAMBRIDGE, MASS.

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

DRAWN L. J. Berkeley 1/19/66
CHECKED
APPROVED
APPROVED
APPROVED MIT 3 Mar 66
APPROVED MSC 3 Mar 66
3/3/66
DATE

K START TAPE ASSEMBLY

CODE IDENT NO. 80230
SIZE C
DRAWING NO. 1026013
SCALE —
SHEET 1 OF 1

1026013 A

NOTICE – WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REVISIONS 26853

SYM	ZONE	DESCRIPTION	DR	CHK	DATE	APPROVED
A		REVISED PER TDRR 28571			5-24-66	
B		REVISED PER TDRR 28570	L.J.B.		4/6/66	

QTY	K START NO. AND REVISION	PROCESS SPEC. AND / OR OCP*	TITLE	EFF.
2	N0011-K00023-02	06504	GYRO INTEG & MISSION PROFILE	SC011 GN017

DOCUMENT LOCATED AT MIT IL STG

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. MATERIAL: ALUMINIZED MYLAR TAPE, $1.000^{\pm.003}$ WIDTH, $3.500^{\pm.003}$ MILS THICK
3. * DENOTES OPERATIONAL CHECKOUT PROCEDURE

MASTER

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY	USED ON

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
CAPACITOR VALUES ARE IN μf
RESISTOR VALUES ARE IN OHMS
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING

MATERIAL
SEE NOTE 2

MIT
INSTRUMENTATION LAB
CAMBRIDGE, MASS.

DRAWN L. J. Berkeley 1/19/66
CHECKED
APPROVED
APPROVED
APPROVED MIT 3 Mar 66
APPROVED MSC 3 Mar 66 3/3/66
DATE

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

K START TAPE
ASSEMBLY

CODE IDENT NO. 80230
SIZE C
DRAWING NO. 1026013
SCALE —
SHEET 1 OF 1

1026013 B

NOTICE – WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REVISIONS 26853

SYM	ZONE	DESCRIPTION	DR	CHK	DATE	APPROVED

QTY	K START NO. AND REVISION	PROCESS SPEC. AND / OR OCP*	TITLE	EFF.
2	N0011-K00023-00	06504	GYRO INTEG & MISSION PROFILE	SC011 GN017

DOCUMENT LOCATED AT MIT IL STG

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. MATERIAL: ALUMINIZED MYLAR TAPE, $1.000^{\pm.003}$ WIDTH, $3.500^{\pm.003}$ MILS THICK
3. * DENOTES OPERATIONAL CHECKOUT PROCEDURE

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY	USED ON

APPLICATION

MASTER

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
CAPACITOR VALUES ARE IN μf
RESISTOR VALUES ARE IN OHMS
TOLERANCES ON
FRACTIONS DECIMALS ANGLES
± ± ±
DO NOT SCALE THIS DRAWING

MATERIAL
SEE NOTE 2

MIT
INSTRUMENTATION LAB
CAMBRIDGE, MASS.

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

DRAWN L. J. Bakeley 1/19/66
CHECKED
APPROVED
APPROVED
APPROVED MIT 3 Mar 66
APPROVED MSC 3 Mar 66
3/3/66
DATE

K START TAPE ASSEMBLY

CODE IDENT NO. 80230
SIZE C
DRAWING NO. 1026013
SCALE —
SHEET 1 OF 1

1026013

NOTICE – WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REVISIONS TDRR-28703

SYM	ZONE	DESCRIPTION	DR	CHK	DATE	APPROVED

QTY	K START NO. AND REVISION	PROCESS SPEC. AND / OR OCP*	TITLE	EFF.
2	F0111-K00014-00		G&N ATTITUDE CONTROL INTERFACE TEST	SC011 BLOCK I SERIES 50 G&N

MASTER DOCUMENTATION LOCATED AT MIT/IL/STG

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. MATERIAL: ALUMINIZED MYLAR TAPE, $1.000^{\pm.003}$ WIDTH, $3.500^{\pm.003}$ MILS THICK
3. * DENOTES OPERATIONAL CHECKOUT PROCEDURE

MASTER

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
CAPACITOR VALUES ARE IN μf
RESISTOR VALUES ARE IN OHMS
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING

MATERIAL
SEE NOTE 2

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

MIT
INSTRUMENTATION LAB
CAMBRIDGE, MASS.

DRAWN L. J. Berkeley 1/19/66
CHECKED [illegible] 9 Feb 66
APPROVED
APPROVED
APPROVED MIT [illegible] May 66
APPROVED MSC G. C. [illegible] 5/11/66
DATE

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

K START TAPE ASSEMBLY

CODE IDENT NO.	SIZE	DRAWING NO.
80230	C	1026015

SCALE —— SHEET 1 OF 1

1026015

NOTICE – WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REVISIONS 28569

SYM	ZONE	DESCRIPTION	DR	CHK	DATE	APPROVED

QTY	K START NO. AND REVISION	PROCESS SPEC. AND / OR OCP*	TITLE	EFF.
2	N0012-K00019-00	06504	G & N OVERALL POLARITY TEST SR-69	SC012 GN012

MASTER DOCUMENTATION LOCATED AT M.I.T./IL/STG

1026027

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. MATERIAL: ALUMINIZED MYLAR TAPE, 1.000 $^{\pm .003}$ WIDTH, 3.500 $^{\pm .003}$ MILS THICK
3. * DENOTES OPERATIONAL CHECKOUT PROCEDURE

MASTER

QTY REQD	PART OR IDENTIFYING NO.	MATERIAL OR NOTES	NOMENCLATURE OR DESCRIPTION	FIND NO

LIST OF MATERIALS

NEXT ASSY	USED ON

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
CAPACITOR VALUES ARE IN µf
RESISTOR VALUES ARE IN OHMS
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING

MATERIAL
SEE NOTE 2

MIT
INSTRUMENTATION LAB
CAMBRIDGE, MASS.

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

DRAWN L. J. Berkeley 1/19/66
CHECKED
APPROVED
APPROVED
APPROVED MIT
APPROVED MSC
DATE

K START TAPE ASSEMBLY

CODE IDENT NO. 80230
SIZE C
DRAWING NO. 1026027
SCALE NONE
SHEET 1 OF 1

NOTICE — WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REVISIONS FDRR-28574

SYM	ZONE	DESCRIPTION	DR	CHK	DATE	APPROVED

QTY	K START NO. AND REVISION	PROCESS SPEC. AND / OR OCP*	TITLE	EFF.
2	F0111-K00040-01		FLIGHT ROPE CONTROLLED MISSION	SC011 GN017

MASTER DOCUMENTATION LOCATED AT
MIT/IL/STG

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. MATERIAL: ALUMINIZED MYLAR TAPE, $1.000^{\pm .003}$ WIDTH, $3.500^{\pm .003}$ MILS THICK
3. * DENOTES OPERATIONAL CHECKOUT PROCEDURE

MASTER

QTY REQD	PART OR IDENTIFYING NO.	MATERIAL OR NOTES	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY	USED ON

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
CAPACITOR VALUES ARE IN µf
RESISTOR VALUES ARE IN OHMS
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING
MATERIAL

MIT
INSTRUMENTATION LAB
CAMBRIDGE, MASS.

DRAWN L. J. Berkeley 1/19/66
CHECKED
APPROVED
APPROVED
APPROVED MIT 1 May 66
APPROVED MSC 5/1/66
DATE

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

K START TAPE
ASSEMBLY

CODE IDENT NO.	SIZE	DRAWING NO.
80230	C	1026034

SCALE —
SHEET 1 OF 1

7DEC299

NOTICE – WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REVISIONS

SYM	ZONE	DESCRIPTION	DR	CHK	DATE	APPROVED

QTY	K START NO. AND REVISION	PROCESS SPEC. AND / OR OCP*	TITLE	EFF.
2	F0111-K00048-00	———	ACE-GN 132-OPT D E-MEMORY	SC011 GN017

MASTER DOCUMENTATION LOCATED AT MIT/IL/STG

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. MATERIAL: ALUMINIZED MYLAR TAPE, 1.000 $^{\pm.003}$ WIDTH, 3.500 $^{\pm.003}$ MILS THICK
3. * DENOTES OPERATIONAL CHECKOUT PROCEDURE

QTY REQD	PART OR IDENTIFYING NO.	MATERIAL OR NOTES	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY	USED ON

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
CAPACITOR VALUES ARE IN µf
RESISTOR VALUES ARE IN OHMS
TOLERANCES ON
FRACTIONS ± — DECIMALS ± — ANGLES ± —
DO NOT SCALE THIS DRAWING
MATERIAL ———

MASTER

MIT
INSTRUMENTATION LAB
CAMBRIDGE, MASS.

DRAWN L. J. Berkeley 1/19/66
CHECKED
APPROVED
APPROVED [illegible] 1966
APPROVED MIT MG Murley 7-1-66
APPROVED MSC [illegible] 7/1/66
DATE

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

K START TAPE ASSEMBLY

CODE IDENT NO. 80230
SIZE C
DRAWING NO. 1026047
SCALE —
SHEET 1 OF 1

1026047

NOTICE – WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REVISIONS TDRR 30163

SYM	ZONE	DESCRIPTION	DR	CHK	DATE	APPROVED
A		REVISED PER TDRR 30538				

QTY	K START NO. AND REVISION	PROCESS SPEC. AND / OR OCP*	TITLE	EFF.
2	F0111-K00039-03	—/ K0021	FLIGHT ROPE CONTROLLED MISSION PROFILE REAL TIME	SC011 GN017

MASTER DOCUMENTATION LOCATED AT MIT/IL/STG

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. MATERIAL: ALUMINIZED MYLAR TAPE, 1.000$^{\pm 003}$ WIDTH, 3.500$^{\pm 003}$ MILS THICK
3. * DENOTES OPERATIONAL CHECKOUT PROCEDURE

MASTER

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
CAPACITOR VALUES ARE IN µf
RESISTOR VALUES ARE IN OHMS
TOLERANCES ON
FRACTIONS ± — DECIMALS ± — ANGLES ± —
DO NOT SCALE THIS DRAWING

MATERIAL —

QTY REQD	PART OR IDENTIFYING NO.	MATERIAL OR NOTES	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

MIT
INSTRUMENTATION LAB
CAMBRIDGE, MASS.

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

DRAWN L. J. Berkeley 1/19/66
CHECKED
APPROVED
APPROVED
APPROVED MIT W G Mueller 7-15-66
APPROVED MSC
DATE

K START TAPE ASSEMBLY

CODE IDENT NO. 80230
SIZE C
DRAWING NO. 1026048
SCALE —
SHEET 1 OF 1

NOTICE – WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REVISIONS TDRR 30163

SYM	ZONE	DESCRIPTION	DR	CHK	DATE	APPROVED
A		REVISED PER TDRR 30538				
B		REVISED PER TDRR 30641			2-17-67	MGM

QTY	K START NO. AND REVISION	PROCESS SPEC. AND / OR OCP*	TITLE	EFF.
2	F0111-K00039-04	—/ K0021	FLIGHT ROPE CONTROLLED MISSION PROFILE REAL TIME	SC011 GN017

MASTER DOCUMENTATION LOCATED AT MIT/IL/STG

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. MATERIAL: ALUMINIZED MYLAR TAPE, $1.000^{\pm .003}$ WIDTH, $3.500^{\pm .003}$ MILS THICK
3. * DENOTES OPERATIONAL CHECKOUT PROCEDURE

QTY REQD	PART OR IDENTIFYING NO.	MATERIAL OR NOTES	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY	USED ON

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
CAPACITOR VALUES ARE IN μf
RESISTOR VALUES ARE IN OHMS
TOLERANCES ON
FRACTIONS DECIMALS ANGLES
± — ± — ± —
DO NOT SCALE THIS DRAWING

MATERIAL
—

MIT
INSTRUMENTATION LAB
CAMBRIDGE, MASS.

DRAWN L. J. Bakeley 1/19/66
CHECKED
APPROVED
APPROVED
APPROVED MIT 7-15-6
APPROVED MSC
DATE

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

K START TAPE ASSEMBLY

CODE IDENT NO. 80230
SIZE C
DRAWING NO. 1026048
SCALE —
SHEET 1 OF 1

1026048

NOTICE – WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REVISIONS TDRR 30163

SYM	ZONE	DESCRIPTION	DR	CHK	DATE	APPROVED

QTY	K START NO. AND REVISION	PROCESS SPEC. AND / OR OCP*	TITLE	EFF.
2	F0111-K00039-01	—/ K0021	FLIGHT ROPE CONTROLLED MISSION PROFILE REAL TIME	SC011 GN017

MASTER DOCUMENTATION LOCATED AT MIT/IL/STG

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. MATERIAL: ALUMINIZED MYLAR TAPE, $1.000^{\pm .003}$ WIDTH, $3.500^{\pm .003}$ MILS THICK
3. * DENOTES OPERATIONAL CHECKOUT PROCEDURE

QTY REQD	PART OR IDENTIFYING NO.	MATERIAL OR NOTES	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
CAPACITOR VALUES ARE IN µf
RESISTOR VALUES ARE IN OHMS
TOLERANCES ON
FRACTIONS DECIMALS ANGLES
± — ± — ± —
DO NOT SCALE THIS DRAWING
MATERIAL
—

MIT
INSTRUMENTATION LAB
CAMBRIDGE, MASS.

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

DRAWN L. J. Berkeley 1/19/66
CHECKED
APPROVED
APPROVED 11 July 66
APPROVED MIT W G Mueller 7-15-66
APPROVED MSC 7/13/66
DATE

K START TAPE ASSEMBLY

CODE IDENT NO. 80230
SIZE C
DRAWING NO. 1026048
SCALE —
SHEET 1 OF 1

1026048

NOTICE — WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REVISIONS DRR 30546

SYM	ZONE	DESCRIPTION	DR	CHK	DATE	APPROVED

QTY	K START NO. AND REVISION	PROCESS SPEC. AND / OR OCP*	TITLE	EFF.
2	FB212-K00014-00	———	GEN SCS INTERFACE	SC012 GN012

1026053

MASTER DOCUMENTATION LOCATED AT MIT/IL/STG

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. MATERIAL: ALUMINIZED MYLAR TAPE, 1.000$^{\pm .003}$ WIDTH, 3.500$^{\pm .003}$ MILS THICK
3. * DENOTES OPERATIONAL CHECKOUT PROCEDURE

QTY REQD	PART OR IDENTIFYING NO.	MATERIAL OR NOTES	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY	USED ON

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
CAPACITOR VALUES ARE IN μf
RESISTOR VALUES ARE IN OHMS
TOLERANCES ON
FRACTIONS DECIMALS ANGLES
± ± ±
DO NOT SCALE THIS DRAWING

MATERIAL

MIT
INSTRUMENTATION LAB
CAMBRIDGE, MASS.

DRAWN	L. J. Berkeley	1/19/66
CHECKED		
APPROVED		
APPROVED		8/8/66
APPROVED MIT		8-8-66
APPROVED MSC		8/8/66
		DATE

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

K START TAPE
ASSEMBLY

CODE IDENT NO.	SIZE	DRAWING NO.
80230	C	1026053
SCALE		SHEET 1 OF 1

NOTICE – WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REVISIONS TDRR 30544

SYM	ZONE	DESCRIPTION	DR	CHK	DATE	APPROVED

QTY	K START NO. AND REVISION	PROCESS SPEC. AND / OR OCP*	TITLE	EFF.
2	FB212-K00020-00	—/—	AGC ALARMS AND INTERRUPTS	SC012 GN012

MASTER DOCUMENTATION LOCATED AT MIT/IL/STG

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. MATERIAL: ALUMINIZED MYLAR TAPE, $1.000^{\pm 003}$ WIDTH, $3.500^{\pm 003}$ MILS THICK
3. * DENOTES OPERATIONAL CHECKOUT PROCEDURE

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
CAPACITOR VALUES ARE IN µf
RESISTOR VALUES ARE IN OHMS
TOLERANCES ON
FRACTIONS DECIMALS ANGLES
± ± ±
DO NOT SCALE THIS DRAWING
MATERIAL

QTY REQD	PART OR IDENTIFYING NO.	MATERIAL OR NOTES	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

MIT
INSTRUMENTATION LAB
CAMBRIDGE, MASS.

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

		DATE
DRAWN	L. J. Berkeley	1/19/66
CHECKED		
APPROVED		
APPROVED	Alaat	8/8/66
APPROVED MIT	M G Unley	8-8-66
APPROVED MSC		8/8/66

K START TAPE ASSEMBLY

CODE IDENT NO.	SIZE	DRAWING NO.
	C	1026055

SCALE

SHEET OF

NOTICE – WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REVISIONS TDRR- 30560

SYM	ZONE	DESCRIPTION	DR	CHK	DATE	APPROVED
A		REVISED PER TDRR 31025			3-22-57	WJM

QTY	K START NO. AND REVISION	PROCESS SPEC. AND / OR OCP*	TITLE	EFF.
2	FB212-K00041-01.		G & N TO S/C POLARITY TEST -/-	SC012 GN012

MASTER DOCUMENTATION LOCATED AT MIT/IL/STG

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. MATERIAL: ALUMINIZED MYLAR TAPE, $1.000^{\pm.003}$ WIDTH, $3.500^{\pm.003}$ MILS THICK
3. * DENOTES OPERATIONAL CHECKOUT PROCEDURE

QTY REQD	PART OR IDENTIFYING NO.	MATERIAL OR NOTES	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
CAPACITOR VALUES ARE IN μf
RESISTOR VALUES ARE IN OHMS
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING

MATERIAL

MIT
INSTRUMENTATION LAB
CAMBRIDGE, MASS.

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

DRAWN L. J. Berkeley 1/19/66
CHECKED
APPROVED
APPROVED 4 Aug '66
APPROVED MIT W G Weasley 8-10-66
APPROVED MSC A C M 8/10/66
DATE

K START TAPE ASSEMBLY

CODE IDENT NO.	SIZE	DRAWING NO.
	C	1026057
SCALE —		SHEET 1 OF 1

NOTICE – WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REVISIONS TDRR-30560

SYM	ZONE	DESCRIPTION	DR	CHK	DATE	APPROVED

QTY	K START NO. AND REVISION	PROCESS SPEC. AND / OR OCP*	TITLE	EFF.
2	FB212-K00041-00		G & N TO S/C POLARITY TEST -/-	SC012 GN012

MASTER DOCUMENTATION LOCATED AT MIT/IL/STG

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. MATERIAL: ALUMINIZED MYLAR TAPE, 1.000 $^{\pm.003}$ WIDTH, 3.500 $^{\pm.003}$ MILS THICK
3. * DENOTES OPERATIONAL CHECKOUT PROCEDURE

QTY REQD	PART OR IDENTIFYING NO.	MATERIAL OR NOTES	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY	USED ON

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
CAPACITOR VALUES ARE IN μf
RESISTOR VALUES ARE IN OHMS
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING

MATERIAL

MIT
INSTRUMENTATION LAB
CAMBRIDGE, MASS.

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

DRAWN	L. J. Berkeley	1/19/66
CHECKED		
APPROVED		
APPROVED		4 Aug '66
APPROVED MIT	M G Wesley	8-10-66
APPROVED MSC		8/10/66
		DATE

K START TAPE ASSEMBLY

CODE IDENT NO.
SIZE C
DRAWING NO. 1026057
SCALE —
SHEET 1 OF 1

NOTICE – WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REVISIONS TDRR 30545

SYM	ZONE	DESCRIPTION	DR	CHK	DATE	APPROVED

QTY	K START NO. AND REVISION	PROCESS SPEC. AND / OR OCP*	TITLE	EFF.
2	FB212-K00054-00		TVC GIMBAL POSITION TEST -/-	SC012 GN012

MASTER DOCUMENTATION LOCATED AT MIT/IL/STG

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. MATERIAL: ALUMINIZED MYLAR TAPE, $1.000^{\pm .003}$ WIDTH, $3.500^{\pm .003}$ MILS THICK
3. * DENOTES OPERATIONAL CHECKOUT PROCEDURE

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
CAPACITOR VALUES ARE IN µf
RESISTOR VALUES ARE IN OHMS
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING
MATERIAL

QTY REQD	PART OR IDENTIFYING NO.	MATERIAL OR NOTES	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

MIT
INSTRUMENTATION LAB
CAMBRIDGE, MASS.

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

DRAWN	L. J. Berkeley	1/19/66
CHECKED		
APPROVED		
APPROVED	A. Laats	8/8/66
APPROVED MIT	W G Marley	8-8-66
APPROVED MSC		8/8/66
		DATE

K START TAPE ASSEMBLY

CODE IDENT NO.	SIZE	DRAWING NO.
	C	1026058
SCALE —		SHEET 1 OF 1

NOTICE – WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REVISIONS TDRR 31412

SYM	ZONE	DESCRIPTION	DR	CHK	DATE	APPROVED
A		REVISED PER TDRR 31952			1-4-67	

QTY	K START NO. AND REVISION	PROCESS SPEC. AND / OR OCP*	TITLE	EFF.
2	F0212-K00041-01	———	G&N TO SPACECRAFT POLARITY TEST	SC012 GN012

MASTER DOCUMENTATION LOCATED AT MIT/IL/STG

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. MATERIAL: ALUMINIZED MYLAR TAPE, $1.000^{\pm .003}$ WIDTH, $3.500^{\pm .003}$ MILS THICK
3. * DENOTES OPERATIONAL CHECKOUT PROCEDURE

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
CAPACITOR VALUES ARE IN µf
RESISTOR VALUES ARE IN OHMS
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING

MATERIAL

QTY REQD	PART OR IDENTIFYING NO.	MATERIAL OR NOTES	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

MIT
INSTRUMENTATION LAB
CAMBRIDGE, MASS.

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

DRAWN L. J. Bakeley 1/19/66
CHECKED
APPROVED
APPROVED 3 Oct 1966
APPROVED MIT 10-3-66
APPROVED MSC 10/5/66
DATE

K START TAPE ASSEMBLY

CODE IDENT NO. 80230
SIZE C
DRAWING NO. 1026060
SCALE
SHEET 1 OF 1

1026060

NOTICE – WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REVISIONS TDRK 3/4/2

SYM	ZONE	DESCRIPTION	DR	CHK	DATE	APPROVED

QTY	K START NO. AND REVISION	PROCESS SPEC. AND / OR OCP*	TITLE	EFF.
2	F0212-K00041-00	———	G&N TO SPACECRAFT POLARITY TEST	SC012 GN012

MASTER DOCUMENTATION LOCATED AT MIT/IL/STG

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. MATERIAL: ALUMINIZED MYLAR TAPE, $1.000^{\pm.003}$ WIDTH, $3.500^{\pm.003}$ MILS THICK
3. * DENOTES OPERATIONAL CHECKOUT PROCEDURE

QTY REQD	PART OR IDENTIFYING NO.	MATERIAL OR NOTES	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY	USED ON

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
CAPACITOR VALUES ARE IN µf
RESISTOR VALUES ARE IN OHMS
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING

MATERIAL

MIT
INSTRUMENTATION LAB
CAMBRIDGE, MASS.

DRAWN L. J. Berkeley 1/19/66
CHECKED
APPROVED
APPROVED
APPROVED MIT 10-3-66
APPROVED MSC 10/5/66
DATE

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

K START TAPE ASSEMBLY

CODE IDENT NO. 80230
SIZE C
DRAWING NO. 1026060
SCALE
SHEET 1 OF 1

NOTICE – WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REVISIONS TDRR 31413

SYM	ZONE	DESCRIPTION	DR	CHK	DATE	APPROVED

QTY	K START NO. AND REVISION	PROCESS SPEC. AND / OR OCP*	TITLE	EFF.
2	F0212-K00020-00	———	AGC ALARMS & INTERUPTS	SC012 GN012

MASTER DOCUMENTATION LOCATED AT MIT/IL/STG

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. MATERIAL: ALUMINIZED MYLAR TAPE, 1.000$^{\pm.003}$ WIDTH, 3.500$^{\pm.003}$ MILS THICK
3. ✱ DENOTES OPERATIONAL CHECKOUT PROCEDURE .

QTY REQD	PART OR IDENTIFYING NO.	MATERIAL OR NOTES	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
CAPACITOR VALUES ARE IN µf
RESISTOR VALUES ARE IN OHMS
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING
MATERIAL

MIT
INSTRUMENTATION LAB
CAMBRIDGE, MASS.

DRAWN L. J. Berkeley 1/19/66
CHECKED
APPROVED
APPROVED 30 Jul 1966
APPROVED MIT M G Mueller 10-5-66
APPROVED MSC A. C. M 10/5/66
DATE

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

K START TAPE
ASSEMBLY

CODE IDENT NO.	SIZE	DRAWING NO.
80230	C	1026062

SCALE
SHEET 1 OF 1

1026062

NOTICE – WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

TDRR 32755

REVISIONS						
SYM	ZONE	DESCRIPTION	DR	CHK	DATE	APPROVED
REV.A		TDRR 32861			2-17-67	WHM

QTY	K START NO. AND REVISION	PROCESS SPEC. AND / OR OCP*	TITLE	EFF.
2	F04C017-K00014-04	———	G&N SCS INTERFACE TEST	G&N 122 S/C 017

MASTER DOCUMENTATION LOCATED AT M.I.T./IL/STG

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. MATERIAL: PAPER BASE TAPE, $1.000^{\pm .003}$ WIDTH, $3.500^{\pm .003}$ MILS THICK
3. * DENOTES OPERATIONAL CHECKOUT PROCEDURE

QTY REQD	PART OR IDENTIFYING NO.	MATERIAL OR NOTES	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
CAPACITOR VALUES ARE IN µf
RESISTOR VALUES ARE IN OHMS
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING

MATERIAL
SEE NOTE 2

MIT
INSTRUMENTATION LAB
CAMBRIDGE, MASS.

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

DRAWN L. J. Barkley 1/19/66
CHECKED
APPROVED
APPROVED 25 Jan 1967
APPROVED MIT 2 Jan 67
APPROVED MSC 1/23/67
DATE

K START TAPE ASSEMBLY

CODE IDENT NO.	SIZE	DRAWING NO.
	C	1026071
SCALE		SHEET OF

NOTICE – WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

TDRR 32755

REVISIONS

SYM	ZONE	DESCRIPTION	DR	CHK	DATE	APPROVED

QTY	K START NO. AND REVISION	PROCESS SPEC. AND / OR OCP*	TITLE	EFF.
2	F04C017-K00014-00	————	G&N SCS INTERFACE TEST	G&N 122 S/C 017

MASTER DOCUMENTATION LOCATED AT M.I.T./IL/STG

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. MATERIAL: PAPER BASE TAPE, $1.000^{\pm.003}$ WIDTH, $3.500^{\pm.003}$ MILS THICK
3. * DENOTES OPERATIONAL CHECKOUT PROCEDURE

QTY REQD	PART OR IDENTIFYING NO.	MATERIAL OR NOTES	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
CAPACITOR VALUES ARE IN μf
RESISTOR VALUES ARE IN OHMS
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING

MATERIAL
SEE NOTE 2

MIT
INSTRUMENTATION LAB
CAMBRIDGE, MASS.

DRAWN L. J. Bowley 1/19/66
CHECKED
APPROVED
APPROVED 23 Jan 1967
APPROVED MIT 23 Jan 67
APPROVED MSC 1/23/67
DATE

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

K START TAPE ASSEMBLY

CODE IDENT NO.
SIZE C
DRAWING NO. 1026071
SCALE
SHEET OF

NOTICE – WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REVISIONS TDRR 32676

SYM	ZONE	DESCRIPTION	DR	CHK	DATE	APPROVED
REV A		Revised PER TDRR 31800			2-13-68	MM

QTY	K START NO. AND REVISION	PROCESS SPEC. AND / OR OCP*	TITLE	EFF.
2	F04C017-K00054-00	———	TVC GIMBAL POSITION TEST	G&N 122 S/C 017 G&N 123 S/C 020

MASTER DOCUMENTATION LOCATED AT M.I.T./IL/STG

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. MATERIAL: PAPER BASE TAPE, $1.000^{\pm .003}$ WIDTH, $3.500^{\pm .003}$ MILS THICK
3. * DENOTES OPERATIONAL CHECKOUT PROCEDURE

QTY REQD	PART OR IDENTIFYING NO.	MATERIAL OR NOTES	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY	USED ON

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
CAPACITOR VALUES ARE IN µf
RESISTOR VALUES ARE IN OHMS
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING

MATERIAL
SEE NOTE 2

MIT
INSTRUMENTATION LAB
CAMBRIDGE, MASS.

DRAWN L. J. Bakeley 1/19/66
CHECKED
APPROVED
APPROVED 19 Jan 1967
APPROVED MIT 1/19/67
APPROVED MSC A C 1/19/67
DATE

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

K START TAPE ASSEMBLY

CODE IDENT NO.
SIZE C
DRAWING NO. 1026073
SCALE
SHEET OF

1026073

NOTICE - WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REVISIONS TDRR 32750

SYM	ZONE	DESCRIPTION	DR	CHK	DATE	APPROVED

QTY	K START NO. AND REVISION	PROCESS SPEC. AND / OR OCP✱	TITLE	EFF.
2	F04C017-K00040-00	————	FLT. ROPE CONTROLLED MISSION SIM FLT COMPRESSED TIME	G&N 122 S/C 017

MASTER DOCUMENTATION LOCATED AT M.I.T./IL/STG

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. MATERIAL: PAPER BASE TAPE, 1.000 ±.003 WIDTH, 3.500 ±.003 MILS THICK
3. ✱ DENOTES OPERATIONAL CHECKOUT PROCEDURE

QTY REQD	PART OR IDENTIFYING NO.	MATERIAL OR NOTES	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY	USED ON

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
CAPACITOR VALUES ARE IN µf
RESISTOR VALUES ARE IN OHMS
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING

MATERIAL
SEE NOTE 2

MIT
INSTRUMENTATION LAB
CAMBRIDGE, MASS

DRAWN L. J. Berkeley 1/19/66
CHECKED
APPROVED
APPROVED 28 Jan 66
APPROVED MIT 28 Ja 66
APPROVED MSC ACM
DATE

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

K START TAPE ASSEMBLY

CODE IDENT NO.
SIZE C
DRAWING NO. 1026075
SCALE
SHEET OF

1026075

NOTICE – WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REVISIONS TDRR 34623

SYM	ZONE	DESCRIPTION	DR	CHK	DATE	APPROVED
A		TDRR 34817			[illegible]	

QTY	K START NO. AND REVISION	PROCESS SPEC. AND / OR OCP*	TITLE	EFF.
2	F014C017 – K00067-0 1		LAUNCH LOAD	SC017 GN122

MASTER DOCUMENTATION LOCATED AT MIT / IL / STG

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. MATERIAL: MYLAR TAPE, 1.000 $^{\pm.003}$ WIDTH, 3.500 $^{\pm.003}$ MILS THICK
3. * DENOTES OPERATIONAL CHECKOUT PROCEDURE

QTY REQD	PART OR IDENTIFYING NO.	MATERIAL OR NOTES	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
CAPACITOR VALUES ARE IN µf
RESISTOR VALUES ARE IN OHMS
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING

MATERIAL
SEE NOTE 2

MIT
INSTRUMENTATION LAB
CAMBRIDGE, MASS

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

DRAWN L. J. Berkeley 14 Sept 67
CHECKED 19 Sept 67
APPROVED 19 Sept 67
APPROVED
APPROVED MIT
APPROVED MSC 9/15/67
DATE

K START TAPE ASSEMBLY

CODE IDENT NO. 80230
SIZE C
DRAWING NO. 1026089
SCALE NONE
SHEET 1 OF 1

1026089

NOTICE – WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

Ⓜ

REVISIONS TDRR 34623

SYM	ZONE	DESCRIPTION	DR	CHK	DATE	APPROVED
A		TDRR 34817			[illegible]	
B		TDRR 34979			10-31-67	

QTY	K START NO. AND REVISION	PROCESS SPEC. AND / OR OCP*	TITLE	EFF.
2	F014C017 — K00067-02		LAUNCH LOAD	SC017 GN 122

MASTER DOCUMENTATION LOCATED AT MIT / IL / STG

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. MATERIAL: MYLAR TAPE, 1.000 ±.003 WIDTH, 3.500 ±.003 MILS THICK
3. * DENOTES OPERATIONAL CHECKOUT PROCEDURE

NEXT ASSY	USED ON
APPLICATION	

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DIMENSIONS ARE IN INCHES
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FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING

MATERIAL
SEE NOTE 2

QTY REQD	PART OR IDENTIFYING NO.	MATERIAL OR NOTES	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

MIT
INSTRUMENTATION LAB
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MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

DRAWN L. J. Bakley 14 Sept 67
CHECKED [illegible] 19 Sept 67
APPROVED [illegible] 19 Sept 67
APPROVED
APPROVED MIT [illegible] 10-3-67
APPROVED MSC [illegible] 9/19/67
DATE

K START TAPE ASSEMBLY

CODE IDENT NO. 80230
SIZE C
DRAWING NO. 1026089
SCALE NONE
SHEET 1 OF 1

NOTICE — WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

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REVISIONS TDRR 34623

SYM	ZONE	DESCRIPTION	DR	CHK	DATE	APPROVED
A		TDRR 34817			11/1/67	
B		TDRR 34979			10-31-67	
C		TDRR 34980			[illegible]	

QTY	K START NO. AND REVISION	PROCESS SPEC. AND / OR OCP*	TITLE	EFF.
2	F014C017 — K00067-03		LAUNCH LOAD	SC 017 GN 122

MASTER DOCUMENTATION LOCATED AT MIT / IL / STG

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. MATERIAL: [illegible] MYLAR TAPE, $1.000^{\pm .003}$ WIDTH, $3.500^{\pm .003}$ MILS THICK
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NEXT ASSY	USED ON
APPLICATION	

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SEE NOTE 2

QTY REQD	PART OR IDENTIFYING NO.	MATERIAL OR NOTES	NOMENCLATURE OR DESCRIPTION	FIND NO.

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MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

DRAWN	L. J. Berkeley	14 Sept 67
CHECKED		19 Sept 67
APPROVED		19 Sept 67
APPROVED		
APPROVED MIT		10-3-67
APPROVED MSC	C. C.	9/19/67
		DATE

K START TAPE ASSEMBLY

CODE IDENT NO.	SIZE	DRAWING NO.
80230	C	1026089
SCALE NONE		SHEET 1 OF 1

NOTICE – WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REVISIONS TDRR 34623

SYM	ZONE	DESCRIPTION	DR	CHK	DATE	APPROVED
A		TDRR 34817			11/1/67	
B		TDRR 34979			10-31-67	
C		TDRR 34980			10-31-67	
D		TDRR 34981			10-31-67	

QTY	K START NO. AND REVISION	PROCESS SPEC. AND / OR OCP*	TITLE	EFF.
2	F014C017 – K00067-04		LAUNCH LOAD	SC 017 GN 122

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NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. MATERIAL: MYLAR TAPE, 1.000 ±.003 WIDTH, 3.500 ±.003 MILS THICK
3. * DENOTES OPERATIONAL CHECKOUT PROCEDURE

QTY REQD	PART OR IDENTIFYING NO.	MATERIAL OR NOTES	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY	USED ON
APPLICATION	

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TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING

MATERIAL
SEE NOTE 2

MIT
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CAMBRIDGE, MASS.

DRAWN L. J. Bakley 14 Sept 67
CHECKED 19 Sept 67
APPROVED 19 Sept 67
APPROVED
APPROVED MIT M. C. Manley 10-3-67
APPROVED MSC 9/19/67
DATE

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

K START TAPE ASSEMBLY

CODE IDENT NO. 80230
SIZE C
DRAWING NO. 1026089
SCALE NONE
SHEET 1 OF 1

NOTICE – WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

4 3 2 1

M

REVISIONS TDRR 34623

SYM	ZONE	DESCRIPTION	DR	CHK	DATE	APPROVED
A		TDRR 34817			[illegible]	
B		TDRR 34979			10-31-67	
C		TDRR 34980			10-31-67	
D		TDRR 34981			10-31-67	
E		TDRR 34982			10-31-67	

QTY	K START NO. AND REVISION	PROCESS SPEC. AND / OR OCP*	TITLE	EFF.
2	F014C017 – K00067-05		LAUNCH LOAD	SC017 GN122

MASTER DOCUMENTATION LOCATED AT MIT / IL / STG

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. MATERIAL: MYLAR TAPE, 1.000 ±.003 WIDTH, 3.500 ±.003 MILS THICK
3. * DENOTES OPERATIONAL CHECKOUT PROCEDURE

QTY REQD	PART OR IDENTIFYING NO.	MATERIAL OR NOTES	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY	USED ON
APPLICATION	

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DIMENSIONS ARE IN INCHES
CAPACITOR VALUES ARE IN µf
RESISTOR VALUES ARE IN OHMS
TOLERANCES ON
FRACTIONS DECIMALS ANGLES
± ± ±
DO NOT SCALE THIS DRAWING

MATERIAL
SEE NOTE 2

MIT
INSTRUMENTATION LAB
CAMBRIDGE, MASS.

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

DRAWN L. J. Berkeley 14 Sept 67
CHECKED 19 Sept 67
APPROVED 19 Sept 67
APPROVED
APPROVED MIT 10-3-67
APPROVED MSC 9/19/67
DATE

K START TAPE ASSEMBLY

CODE IDENT NO.	SIZE	DRAWING NO.
80230	C	1026089

SCALE NONE
SHEET 1 OF 1

4 3 2 1

NOTICE - WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

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REVISIONS TDRR 34623

SYM	ZONE	DESCRIPTION	DR	CHK	DATE	APPROVED
A		TDRR 34817			10/11/67	
B		TDRR 34979			10-31-67	
C		TDRR 34980			10-31-67	
D		TDRR 34981			10-31-67	
E		TDRR 34982			10-31-67	
F		TDRR 34983			10-31-67	

QTY	K START NO. AND REVISION	PROCESS SPEC. AND / OR OCP*	TITLE	EFF.
2	F014C017 — K00067-08		LAUNCH LOAD	SC017 GN 122

MASTER DOCUMENTATION LOCATED AT MIT / IL / STG

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. MATERIAL: [illegible] MYLAR TAPE, $1.000^{\pm .003}$ WIDTH, $3.500^{\pm .003}$ MILS THICK
3. * DENOTES OPERATIONAL CHECKOUT PROCEDURE

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
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FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING

MATERIAL
SEE NOTE 2

QTY REQD	PART OR IDENTIFYING NO.	MATERIAL OR NOTES	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

MIT
INSTRUMENTATION LAB
CAMBRIDGE, MASS.

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

DRAWN L. J. Bakley 14 Sept 67
CHECKED 19 Sept 67
APPROVED 19 Sept 67
APPROVED
APPROVED MIT 10-3-67
APPROVED MSC 9/19/67
DATE

K START TAPE ASSEMBLY

CODE IDENT NO. 80230
SIZE C
DRAWING NO. 1026089
SCALE NONE
SHEET 1 OF 1

NOTICE – WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

Ⓜ

REVISIONS TDRR 34623

SYM	ZONE	DESCRIPTION	DR	CHK	DATE	APPROVED
A		TDRR 34817			10/11/67	
B		TDRR 34979			10-31-67	
C		TDRR 34980			10-31-67	
D		TDRR 34981			10-31-67	
E		TDRR 34982			10-31-67	
F		TDRR 34983			10-31-67	
G		TDRR 34984			10-31-67	

QTY	K START NO. AND REVISION	PROCESS SPEC. AND / OR OCP*	TITLE	EFF.
2	F014C017 — K00067-07		LAUNCH LOAD	SC 017 GN 122

MASTER DOCUMENTATION LOCATED AT MIT / IL / STG

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. MATERIAL: MYLAR TAPE, 1.000 ±.003 WIDTH, 3.500 ±.003 MILS THICK
3. * DENOTES OPERATIONAL CHECKOUT PROCEDURE

QTY REQD	PART OR IDENTIFYING NO.	MATERIAL OR NOTES	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY | USED ON

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
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RESISTOR VALUES ARE IN OHMS
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING

MATERIAL
SEE NOTE 2

MIT
INSTRUMENTATION LAB
CAMBRIDGE, MASS

DRAWN L. J. Bakeley 14 Sept 67
CHECKED 19 Sept 67
APPROVED 19 Sept 67
APPROVED
APPROVED MIT M. Munley 10-3-67
APPROVED MSC 9/19/67
DATE

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

K START TAPE ASSEMBLY

CODE IDENT NO. 80230
SIZE C
DRAWING NO. 1026089
SCALE NONE
SHEET 1 OF 1

NOTICE – WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

M

REVISIONS TDRR 34623

SYM	ZONE	DESCRIPTION	DR	CHK	DATE	APPROVED
A		TDRR 34817			[illegible]	
B		TDRR 34979			10-31-67	
C		TDRR 34980			10-31-67	
D		TDRR 34981			10-31-67	
E		TDRR 34982			10-31-67	
F		TDRR 34983			10-31-67	
G		TDRR 34984			10-31-67	
H		TDRR 34985			10-31-67	

QTY	K START NO. AND REVISION	PROCESS SPEC. AND / OR OCP*	TITLE	EFF.
2	F014C017 – K00067-08		LAUNCH LOAD	SC017 GN 122

MASTER DOCUMENTATION LOCATED AT MIT / IL / STG

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. MATERIAL: MYLAR TAPE, 1.000 ±.003 WIDTH, 3.500 ±.003 MILS THICK
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SEE NOTE 2

MIT
INSTRUMENTATION LAB
CAMBRIDGE, MASS

DRAWN	L. J. Bakeley	14 Sept 67
CHECKED		19 Sept 67
APPROVED		19 Sep 67
APPROVED		
APPROVED MIT		10-3-67
APPROVED MSC		9/19/67
		DATE

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

K START TAPE ASSEMBLY

CODE IDENT NO.	SIZE	DRAWING NO.
80230	C	1026089

SCALE NONE

SHEET 1 OF 1

NOTICE - WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS, OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REVISIONS TDRR 34623

SYM	ZONE	DESCRIPTION	DR	CHK	DATE	APPROVED

QTY	K START NO. AND REVISION	PROCESS SPEC. AND / OR OCP#	TITLE	EFF.
2	F014C017 — K00067-00		LAUNCH LOAD	SC017 GN122

MASTER DOCUMENTATION LOCATED AT MIT / IL / STG

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. MATERIAL: MYLAR TAPE, 1.000 $^{\pm.003}$ WIDTH, 3.500 $^{\pm.003}$ MILS THICK
3. # DENOTES OPERATIONAL CHECKOUT PROCEDURE

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TOLERANCES ON
FRACTIONS DECIMALS ANGLES
± ± ±
DO NOT SCALE THIS DRAWING

MATERIAL
SEE NOTE 2

MIT
INSTRUMENTATION LAB
CAMBRIDGE, MASS

DRAWN L. J. Bakley 14 Sept 67
CHECKED [illegible] 19 Sept 67
APPROVED [illegible] 19 Sept 67
APPROVED

APPROVED MIT

APPROVED MSC A. C. [illegible] 9/19/67
DATE

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

K START TAPE ASSEMBLY

CODE IDENT NO. 80230
SIZE C
DRAWING NO. 1026089
SCALE NONE
SHEET 1 OF 1

1026089 -

NOTICE – WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REVISIONS TDRR 34624

SYM	ZONE	DESCRIPTION	DR	CHK	DATE	APPROVED
A		TDRR 34817			10-11-67	

QTY	K START NO. AND REVISION	PROCESS SPEC. AND / OR OCP*	TITLE	EFF.
2	F014C017– K00068-01		MISSION LOAD	SC017 GN122

MASTER DOCUMENTATION LOCATED AT MIT / IL / STG

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. MATERIAL: MYLAR TAPE, 1.000 ±.003 WIDTH, 3.500 ±.003 MILS THICK
3. * DENOTES OPERATIONAL CHECKOUT PROCEDURE

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
CAPACITOR VALUES ARE IN µf
RESISTOR VALUES ARE IN OHMS
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING

MATERIAL
SEE NOTE 2

QTY REQD	PART OR IDENTIFYING NO.	MATERIAL OR NOTES	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

MIT
INSTRUMENTATION LAB
CAMBRIDGE, MASS.

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

DRAWN	L. J. Bakley	14Sep67
CHECKED	[illegible]	15Sep67
APPROVED	Alaat	19Sep67
APPROVED		
APPROVED MIT	M G Mckey	10-11-67
APPROVED MSC	[illegible]	9/17/67
		DATE

K START TAPE ASSEMBLY

CODE IDENT NO.	SIZE	DRAWING NO.
80230	C	1026090

SCALE NONE

SHEET 1 OF 1

NOTICE - WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS, OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REVISIONS TQRR 34624

SYM	ZONE	DESCRIPTION	DR	CHK	DATE	APPROVED

QTY	K START NO. AND REVISION	PROCESS SPEC. AND / OR OCP*	TITLE	EFF.
2	F014C017 — K00068-00		MISSION LOAD	SC017 GN122

MASTER DOCUMENTATION LOCATED AT MIT / IL / STG

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. MATERIAL: MYLAR TAPE, 1.000 $\pm .003$ WIDTH, 3.500 $\pm .003$ MILS THICK
3. * DENOTES OPERATIONAL CHECKOUT PROCEDURE

QTY REQD	PART OR IDENTIFYING NO.	MATERIAL OR NOTES	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
CAPACITOR VALUES ARE IN µf
RESISTOR VALUES ARE IN OHMS
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING

MATERIAL
SEE NOTE 2

MIT
INSTRUMENTATION LAB
CAMBRIDGE, MASS.

DRAWN L. J. Barkley 14Sep67
CHECKED [illegible] 15Sep67
APPROVED [illegible] 17Sep67
APPROVED

APPROVED MIT

APPROVED MSC 9/11/67
DATE

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

K START TAPE ASSEMBLY

CODE IDENT NO. 80230
SIZE C
DRAWING NO. 1026090
SCALE NONE
SHEET 1 OF 1

1026090-1

NOTICE – WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REVISIONS TDRR 34625

SYM	ZONE	DESCRIPTION	DR	CHK	DATE	APPROVED
A		TDRR 34817			10/11/67	

QTY	K START NO. AND REVISION	PROCESS SPEC. AND / OR OCP*	TITLE	EFF.
2	F014C017— K00073-01 1		FLIGHT READINESS SIM FLIGHT TEST	SC017 GN122

MASTER DOCUMENTATION LOCATED AT MIT / IL / STG

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. MATERIAL: MYLAR TAPE, $1.000^{\pm .003}$ WIDTH, $3.500^{\pm .003}$ MILS THICK
3. * DENOTES OPERATIONAL CHECKOUT PROCEDURE

QTY REQD	PART OR IDENTIFYING NO.	MATERIAL OR NOTES	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY	USED ON

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
CAPACITOR VALUES ARE IN µf
RESISTOR VALUES ARE IN OHMS
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING

MATERIAL
SEE NOTE 2

MIT
INSTRUMENTATION LAB
CAMBRIDGE, MASS.

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

DRAWN L. J. Berkeley 19 Sept 67
CHECKED 19 Sep '67
APPROVED 19 Sep '67
APPROVED
APPROVED MIT
APPROVED MSC G. C. 9/8/67 DATE

K START TAPE ASSEMBLY

CODE IDENT NO.	SIZE	DRAWING NO.
80230	C	1026091

SCALE NONE
SHEET 1 OF 1

NOTICE – WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REVISIONS TDRR 34625

SYM	ZONE	DESCRIPTION	DR	CHK	DATE	APPROVED

QTY	K START NO. AND REVISION	PROCESS SPEC. AND / OR OCP*	TITLE	EFF.
2	F014C017— K00073-00		FLIGHT READINESS SIM FLIGHT TEST	SC017 GN122

MASTER DOCUMENTATION LOCATED AT MIT / IL / STG

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. MATERIAL: MYLAR; TAPE, 1.000 $\pm.003$ WIDTH, 3.500 $\pm.003$ MILS THICK
3. * DENOTES OPERATIONAL CHECKOUT PROCEDURE

QTY REQD	PART OR IDENTIFYING NO.	MATERIAL OR NOTES	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY	USED ON

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
CAPACITOR VALUES ARE IN μf
RESISTOR VALUES ARE IN OHMS
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING

MATERIAL
SEE NOTE 2

MIT
INSTRUMENTATION LAB
CAMBRIDGE, MASS.

DRAWN	L. J. Barkley	19 Sept 67
CHECKED		19 Sep '67
APPROVED		19 Sep '67
APPROVED		
APPROVED MIT		
APPROVED MSC	G. C.	9/8/67
		DATE

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

K START TAPE
ASSEMBLY

CODE IDENT NO.	SIZE	DRAWING NO.
80230	C	1026091

SCALE NONE

SHEET 1 OF 1

1026091

NOTICE - WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REVISIONS TDRR 35150 NOV 21 1967

SYM	ZONE	DESCRIPTION	DR	CHK	DATE	APPROVED
A		TDRR 35251			12/[illegible]/67	
B		TDRR 35380			1/10/68	

QTY	K START NO. AND REVISION	PROCESS SPEC. AND / OR OCP*	TITLE	EFF.
2	F06L001 K00068-02		ERASABLE MISSION LOAD	G&N 603

MASTER DOCUMENTATION LOCATED AT MIT/IL STG.

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. MATERIAL: MYLAR BASE TAPE, 1.000 $\pm .003$ WIDTH, 3.500 $\pm .003$ MILS THICK
3. * DENOTES OPERATIONAL CHECKOUT PROCEDURE

QTY REQD	PART OR IDENTIFYING NO.	MATERIAL OR NOTES	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

6014999	
NEXT ASSY	USED ON

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
CAPACITOR VALUES ARE IN μf
RESISTOR VALUES ARE IN OHMS
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING

MATERIAL
SEE NOTE 2

MIT
INSTRUMENTATION LAB
CAMBRIDGE, MASS.

DRAWN L. J. Bakeley 1/19/66
CHECKED
APPROVED [illegible]
APPROVED
APPROVED MIT 11-21-67
APPROVED MSC A.C. 1/19/67
DATE

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

K START TAPE ASSEMBLY

CODE IDENT NO.
SIZE C
DRAWING NO. 1026094
SCALE
SHEET OF

1026094

REVISIONS TDRR 30854					
ZONE	LTR	DESCRIPTION		DATE	APPD
A		REVISED PER TDRR 30855	CHG. NO.	1 SEPT 66	JI RPS

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARD PRESCRIBED BY MIL-D-70327.
2. MATERIAL: MYLAR TAPE 1.000 ±.003 WIDTH 3.500±.003 MILS THICK.
3. ✳ DENOTES OPERATIONAL CHECK OUT PROCEDURE.

QTY	K START NO. AND REVISION	PROCESS SPEC AND/OR OCP ✳	TITLE	EFF
2	N00C017-K00023-00	MA0201-5171	KST TAPE CON'T SIM FLT	S/C 017
2	N00C017-K00023-01	MA0201-5171	KST TAPE CON'T SIM FLT	S/C 017

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ON 2 PLACE DECIMALS ± 3 PLACE DECIMALS ± ANGLES ±	AC ELECTRONICS DIVISION GENERAL MOTORS CORP. MILWAUKEE WIS.	MANNED SPACECRAFT CENTER HOUSTON, TEXAS
DO NOT SCALE THIS DRAWING	DRAWN G.W. Wolf DATE 23-AUG-66 CHECKED J. Imbordino APPROVAL P. Koppen 25AUG 66 CONTRACT NAS 9-497	K-START TAPE ASSEMBLY
MATERIAL	NASA APPROVAL	SIZE CODE IDENT NO. 99974 1026100
APPROVAL	CCB APPROVAL E N Aut 8/26/66	SCALE SHEET 1 OF 1

REVISIONS TDRR 30854

ZONE	LTR	DESCRIPTION	CHG. NO.	DATE	APPD

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARD PRESCRIBED BY MIL-D-70327.
2. MATERIAL: MYLAR TAPE 1.000 ±.003 WIDTH 3.500±.003 MILS THICK.
3. * DENOTES OPERATIONAL CHECK OUT PROCEDURE

QTY	K START NO. AND REVISION	PROCESS SPEC AND/OR OCP *	TITLE	EFF
2	K00017-K00023-00	MA0201-5171	KST TAPE CCN'T SIM FLT	S/C 017

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
2 PLACE DECIMALS ±
3 PLACE DECIMALS ±
ANGLES ±
DO NOT SCALE THIS DRAWING
MATERIAL
APPROVAL

AC ELECTRONICS DIVISION
GENERAL MOTORS CORP. MILWAUKEE WIS
DRAWN C.W. Wolf DATE 23-AUG-66
CHECKED
APPROVAL 25AUG 66
CONTRACT NAS 9-497
NASA APPROVAL
S-8 APPROVAL 8/30/66

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

K-START TAPE ASSEMBLY

SIZE
CODE IDENT NO. 99974
1026100
SCALE
SHEET 1 OF 1

REVISIONS

ZONE	LTR	DESCRIPTION	CHG. NO.	DATE	APPD
Ⓜ		INITIAL RELEASE TORR 31028		9/14/66	

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327.
2. MATERIAL: MYLAR TAPE 1.000±.003 WIDTH 3.500±.003 MILS THICK.
3. ✳ DENOTES OPERATIONAL CHECK OUT PROCEDURE.

QTY	K START NO. AND REVISION	PROCESS SPEC. AND/OR OCP ✳	TITLE	EFF
2	G03LTA8-K10500-00	LAV 560-809	FWD LAT. VEL. METER TEST	LTA8

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
2 PLACE DECIMALS + ___ − ___
3 PLACE DECIMALS + ___ − ___
ANGLES + ___ − ___
DO NOT SCALE THIS DRAWING
MATERIAL SEE NOTE 2
APPROVAL

AC ELECTRONICS DIVISION
GENERAL MOTORS CORP MILWAUKEE WIS
DRAWN E. Kitzow DATE 9 SEP 66
CHECKED 12 SEP 66
APPROVAL G. Bergman 13 SEP 66
CONTRACT NAS 9-497
NASA APPROVAL 9/14/66
AC APPROVAL 9/14/66

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

K-START TAPE
ASSEMBLY
(G03LTA8-K10500)

SIZE C
CODE IDENT NO. 99974
1026105
SCALE ——
SHEET 1 OF 1

1026105

REVISIONS					
ZONE	LTR	DESCRIPTION	CHG. NO.	DATE	APPD
		INITIAL RELEASE TDRR 31029		9/14/66	

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327.
2. MATERIAL: MYLAR TAPE 1.000 ± .003 WIDTH 3.500 ± .003 MILS THICK.
3. ✱ DENOTES OPERATIONAL CHECK OUT PROCEDURE.

QTY	K START NO. AND REVISION	PROCESS SPEC. AND/OR OCP ✱	TITLE	EFF
2	G03LTA8-K10502-00	LAV 560-809	LEM ALT. ALT. RATE METER	LTA8

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
2 PLACE DECIMALS ± ___ 3 PLACE DECIMALS ± ___ ANGLES ± ___
DO NOT SCALE THIS DRAWING

MATERIAL
SEE NOTE 2

APPROVAL

AC ELECTRONICS DIVISION
GENERAL MOTORS CORP. MILWAUKEE WIS.

DRAWN C. Kitzow DATE 9 SEP 66
CHECKED A. King 12 SEP 66
APPROVAL J. Bergman 13 SEP 66
CONTRACT NAS 9-497
NASA APPROVAL 9/14/66
~~SH~~ AC APPROVAL J. J. Puzzala 9/14/66

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

K-START TAPE ASSEMBLY (G03LTA8-K10502)

SIZE C
CODE IDENT NO. 99974
1026106
SCALE —
SHEET 1 OF 1

MIL 1052C P

REVISIONS					
ZONE	LTR	DESCRIPTION	CHG. NO.	DATE	APPD
		INITIAL RELEASE TDRR 31030		9/14/66	

Ⓜ

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327.
2. MATERIAL: MYLAR TAPE 1.000±.003 WIDTH 3.500±.003 MILS THICK.
3. ✱ DENOTES OPERATIONAL CHECK OUT PROCEDURE.

QTY	K START NO. AND REVISION	PROCESS SPEC. AND/OR OCP ✱	TITLE	EFF
2	G03LTA8-K10506-00	LAV 560-809	IMU-AGS STATE VECTOR XFER	LTA8

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ON 2 PLACE DECIMALS ± 3 PLACE DECIMALS ± ANGLES ±	AC ELECTRONICS DIVISION GENERAL MOTORS CORP MILWAUKEE WIS	MANNED SPACECRAFT CENTER HOUSTON, TEXAS
DO NOT SCALE THIS DRAWING	DRAWN DATE 9 SEP 66 CHECKED 12 SEP 66 APPROVAL G. Bergman 13 SEP 66 CONTRACT NAS 9-497	K-START TAPE ASSEMBLY (G03LTA8-K10506)
MATERIAL SEE NOTE 2	NASA APPROVAL 9/14/66 ~~MIT~~ AC APPROVAL J. F. Pozzal 9/14/66	SIZE C CODE IDENT NO. 99974 1026107
APPROVAL		SCALE —— SHEET 1 OF 1

REVISIONS					
ZONE	LTR	DESCRIPTION		DATE	APPD
Ⓜ		INITIAL RELEASE TDRR 31031	CHG. NO.	9/14/66	

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327.
2. MATERIAL: MYLAR TAPE 1.000±.003 WIDTH 3.500±.003 MILS THICK.
3. ✱ DENOTES OPERATIONAL CHECK OUT PROCEDURE.

QTY	K START NO. AND REVISION	PROCESS SPEC. AND/OR OCP ✱	TITLE	EFF
2	G03LTA8-K10508-00	LAV 560-809	RDRREV DOWNLINK LIST	LTA8

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
2 PLACE DECIMALS ± ___ 3 PLACE DECIMALS ± ___ ANGLES ± ___
DO NOT SCALE THIS DRAWING
MATERIAL SEE NOTE 2
APPROVAL

AC ELECTRONICS DIVISION
GENERAL MOTORS CORP MILWAUKEE WIS
DRAWN E. Kitzow DATE 9SEP 66
CHECKED Kuna 12SEP66
APPROVAL G. Bergman 13SEP66
CONTRACT NAS 9-497
NASA APPROVAL 9/1
AC APPROVAL 9/14/66

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

K-START TAPE
ASSEMBLY
(G03LTA8-K10508)

SIZE C
CODE IDENT NO 99974
1026108
SCALE ——
SHEET 1 OF 1

REVISIONS					
ZONE	LTR	DESCRIPTION	CHG. NO.	DATE	APPD
		INITIAL RELEASE TDRR 31032		9/14/66	

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327.
2. MATERIAL: MYLAR TAPE 1.000±.003 WIDTH 3.500±.003 MILS THICK.
3. * DENOTES OPERATIONAL CHECK OUT PROCEDURE.

QTY	K START NO. AND REVISION	PROCESS SPEC. AND/OR OCP *	TITLE	EFF
2	G03LTA8-K10509-00	LAV 560-809	FDAI STEERING ERROR TEST	LTA8

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ON 2 PLACE DECIMALS + ___ − 3 PLACE DECIMALS + ___ − ANGLES + ___ −	AC ELECTRONICS DIVISION GENERAL MOTORS CORP. MILWAUKEE WIS.	MANNED SPACECRAFT CENTER HOUSTON, TEXAS
DO NOT SCALE THIS DRAWING	DRAWN DATE 9 SEP 66 CHECKED King 12SEP66 APPROVAL G. Bergman 13SEP66 CONTRACT NAS 9-497	K-START TAPE ASSEMBLY (G03LTA8-K10509)
MATERIAL SEE NOTE 2	NASA APPROVAL 9/14/66	SIZE C CODE IDENT NO. 99974 1026109
APPROVAL	~~NMT~~ AC APPROVAL 9/14/66	SCALE —— SHEET 1 OF 1

REVISIONS					
ZONE	LTR	DESCRIPTION	CHG. NO.	DATE	APPD
		INITIAL RELEASE TDRR 31033		9/14/66	

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327.
2. MATERIAL: MYLAR TAPE 1.000±.003 WIDTH 3.500±.003 MILS THICK.
3. ✳ DENOTES OPERATIONAL CHECK OUT PROCEDURE.

QTY	K START NO. AND REVISION	PROCESS SPEC. AND/OR OCP ✳	TITLE	EFF
2	N00C020-K00014-00	NAA LETTER 66MA7116	G&N SCS INTERFACE	S/C 20

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ON 2 PLACE DECIMALS ± ____ 3 PLACE DECIMALS ± ____ ANGLES ± ____	AC ELECTRONICS DIVISION GENERAL MOTORS CORP MILWAUKEE WIS	MANNED SPACECRAFT CENTER HOUSTON, TEXAS
DO NOT SCALE THIS DRAWING	DRAWN E. Litzow DATE 9 SEP 66 CHECKED 12 SEP 66 APPROVAL G. Bergman 13 SEP 66 CONTRACT NAS 9-497	K-START TAPE ASSEMBLY (N00C020-K00014)
MATERIAL SEE NOTE 2	NASA APPROVAL 9/14/66	SIZE C · CODE IDENT NO. 99974 · 1026115
APPROVAL	AC APPROVAL 9/14/66	SCALE ____ · SHEET 1 OF 1

	ZONE	LTR	DESCRIPTION		DATE	APPD
M			INITIAL RELEASE TDRR 31034	CHG. NO.	9/14/66	

REVISIONS

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327.
2. MATERIAL: MYLAR TAPE 1.000 ± .003 WIDTH 3.500 ± .003 MILS THICK.
3. * DENOTES OPERATIONAL CHECK OUT PROCEDURE.

QTY	K START NO. AND REVISION	PROCESS SPEC. AND/OR OCP *	TITLE	EFF
2	N00C020-K00019-00	NAA LETTER 66 MA 7116	G & N POLARITY TEST	S/C 20

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ON 2 PLACE DECIMALS ± ___ 3 PLACE DECIMALS ± ___ ANGLES ± ___	**AC ELECTRONICS DIVISION** GENERAL MOTORS CORP. MILWAUKEE WIS.	MANNED SPACECRAFT CENTER HOUSTON, TEXAS	
DO NOT SCALE THIS DRAWING	DRAWN E. L. Bow DATE 9 SEP 66 CHECKED J. Lima 12 SEP 66 APPROVAL G. Bergman 13 SEP 66 CONTRACT NAS 9-497	K-START TAPE ASSEMBLY (N00C020-K00019)	
MATERIAL SEE NOTE 2	NASA APPROVAL 9/14/66	SIZE C	CODE IDENT NO. 99974
APPROVAL	AC APPROVAL 9/14/66	SCALE ___	1026116 SHEET 1 OF 1

REVISIONS TDRR 31570					
ZONE	LTR	DESCRIPTION	CHG. NO.	DATE	APPD

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327.

2. MATERIAL: MYLAR TAPE 1.000 ± .003 WIDTH 3.500 ± .003 MILS THICK.

3. ✳ DENOTES OPERATIONAL CHECK OUT PROCEDURE.

QTY	K START NO. AND REVISION	PROCESS SPEC. AND/OR OCP ✳	TITLE	EFF
2	G03LTA8-K10501-00	LAV-560-809	DESCENT/DRY CYCLE PROFILE	LTA8

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ON 2 PLACE DECIMALS ± ___ 3 PLACE DECIMALS ± ___ ANGLES ± ___	AC ELECTRONICS DIVISION GENERAL MOTORS CORP. MILWAUKEE WIS.	MANNED SPACECRAFT CENTER HOUSTON, TEXAS
DO NOT SCALE THIS DRAWING	DRAWN D. DEKU DATE 26 SEPT 66 CHECKED D. WERGINZ APPROVAL G.E. Bergman 3 OCT 66 CONTRACT NAS 9-4971	K-START TAPE ASSEMBLY
MATERIAL SEE NOTE 2	NASA APPROVAL	SIZE C · CODE IDENT NO. 99974 · 1026120
APPROVAL	CCB APPROVAL 11/7/66	SCALE ___ · SHEET 1 OF 1

REVISIONS TDRR 31569

ZONE	LTR	DESCRIPTION	CHG. NO.	DATE	APPD

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327.
2. MATERIAL: MYLAR TAPE 1.000±.003 WIDTH 3.500±.003 MILS THICK.
3. ✳ DENOTES OPERATIONAL CHECK OUT PROCEDURE.

QTY	K START NO. AND REVISION	PROCESS SPEC. AND/OR OCP ✳	TITLE	EFF
2	G03LTA8-K10503-00	LAV-560-809	RCS MALFUNCTION LOGIC	LTA8

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
2 PLACE DECIMALS ± ___ 3 PLACE DECIMALS ± ___ ANGLES ± ___
DO NOT SCALE THIS DRAWING
MATERIAL SEE NOTE 2
APPROVAL

AC ELECTRONICS DIVISION
GENERAL MOTORS CORP. MILWAUKEE WIS.
DRAWN D. DEKU DATE 26 SEPT 66
CHECKED D. WERGINZ
APPROVAL G. E. Bergman 3 OCT 66
CONTRACT NAS 9-497
NASA APPROVAL
CCB APPROVAL 10/17/66

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

K-START TAPE ASSEMBLY

SIZE C
CODE IDENT NO. 99974
1026121
SCALE —
SHEET 1 OF 1

REVISIONS TDRR 31568

ZONE	LTR	DESCRIPTION	CHG. NO.	DATE	APPD

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327.
2. MATERIAL: MYLAR TAPE 1.000 ± .003 WIDTH 3.500 ± .003 MILS THICK.
3. ✳ DENOTES OPERATIONAL CHECK OUT PROCEDURE.

QTY	K START NO. AND REVISION	PROCESS SPEC. AND/OR OCP ✳	TITLE	EFF
2	G03LTA8-K10504-00	LAV-560-809	LMP SEQUENCING TAPE	LTA8

UNLESS OTHERWISE SPECIFIED	AC ELECTRONICS DIVISION GENERAL MOTORS CORP. MILWAUKEE WIS.	MANNED SPACECRAFT CENTER HOUSTON, TEXAS
DIMENSIONS ARE IN INCHES TOLERANCES ON 2 PLACE DECIMALS + ___ − ___ 3 PLACE DECIMALS + ___ − ___ ANGLES + ___ − ___	DRAWN D. DEKU DATE 26 SEPT 66 CHECKED D. WERGINZ APPROVAL G. E. Bergman 3 OCT 66 CONTRACT NAS 9-497	K-START TAPE ASSEMBLY
DO NOT SCALE THIS DRAWING	NASA APPROVAL	SIZE C CODE IDENT NO. 99974 1026122
MATERIAL SEE NOTE 2 APPROVAL	CCB APPROVAL 10/17/66	SCALE —— SHEET 1 OF 1

1026123

REVISIONS TDRR 31567

ZONE	LTR	DESCRIPTION	CHG. NO.	DATE	APPD

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327.
2. MATERIAL: MYLAR TAPE 1.000±.003 WIDTH 3.500±.003 MILS THICK.
3. ✳ DENOTES OPERATIONAL CHECK OUT PROCEDURE.

QTY	K START NO. AND REVISION	PROCESS SPEC. AND/OR OCP ✳	TITLE	EFF
2	G03LTA8-K10505-00	LAV-560-809	MISSION SIMULATION TAPE	LTA8

UNLESS OTHERWISE SPECIFIED	AC ELECTRONICS DIVISION	MANNED SPACECRAFT CENTER
DIMENSIONS ARE IN INCHES TOLERANCES ON	GENERAL MOTORS CORP. MILWAUKEE WIS.	HOUSTON, TEXAS
2 PLACE DECIMALS + ___ − ; 3 PLACE DECIMALS + ___ − ; ANGLES + ___ −	DRAWN D. DEKU DATE 26 SEPT. 66	K-START TAPE ASSEMBLY
	CHECKED D. WERGINZ	
	APPROVAL G.E. Bergman 3 OCT 66	
DO NOT SCALE THIS DRAWING	CONTRACT NAS 9-497	
MATERIAL SEE NOTE 2	NASA APPROVAL	SIZE C; CODE IDENT NO. 99974; 1026123
APPROVAL	CCB APPROVAL 11/17/66	SCALE ——; SHEET 1 OF 1

MIL-1052C P

REVISIONS TDRR 31566

ZONE	LTR	DESCRIPTION	CHG. NO.	DATE	APPD

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327.
2. MATERIAL: MYLAR TAPE 1.000±.003 WIDTH 3.500±.003 MILS THICK.
3. ✳ DENOTES OPERATIONAL CHECK OUT PROCEDURE.

QTY	K START NO. AND REVISION	PROCESS SPEC. AND/OR OCP ✳	TITLE	EFF
2	G03LTA8-K10507-00	LAV-560-809	LEM-FDAI TOT ATT TEST	LTA8

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ON 2 PLACE DECIMALS + — − — 3 PLACE DECIMALS + — − — ANGLES + — − —	AC ELECTRONICS DIVISION GENERAL MOTORS CORP. MILWAUKEE WIS.	MANNED SPACECRAFT CENTER HOUSTON, TEXAS
DO NOT SCALE THIS DRAWING	DRAWN D. DEKU DATE 26 SEPT 66 CHECKED D.WERGINZ APPROVAL G.E. Bergman 3 OCT 66 CONTRACT NAS 9-4971	K-START TAPE ASSEMBLY
MATERIAL SEE NOTE 2	NASA APPROVAL	SIZE C CODE IDENT NO. 99974 1026124
APPROVAL	CCB APPROVAL 10/7/66	SCALE — SHEET 1 OF 1

1026124

REVISIONS TDRR 31565

ZONE	LTR	DESCRIPTION	CHG. NO.	DATE	APPD

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327.
2. MATERIAL: MYLAR TAPE 1.000±.003 WIDTH 3.500±.003 MILS THICK.
3. ✳ DENOTES OPERATIONAL CHECK OUT PROCEDURE.

QTY	K START NO. AND REVISION	PROCESS SPEC. AND/OR OCP ✳	TITLE	EFF
2	G03LTA8-K10510-00	LAV-560-809	LEM FCS-ASCENT PROFILE	LTA8

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ON 2 PLACE DECIMALS ± 3 PLACE DECIMALS ± ANGLES ±	**AC ELECTRONICS DIVISION** GENERAL MOTORS CORP. MILWAUKEE WIS.	MANNED SPACECRAFT CENTER HOUSTON, TEXAS
DO NOT SCALE THIS DRAWING	DRAWN D. DEKU DATE 26 SEPT 66 CHECKED D. WERGINZ APPROVAL G.E. Bergman 30 S 66 CONTRACT NAS 9-497	K-START TAPE ASSEMBLY
MATERIAL SEE NOTE 2	NASA APPROVAL	SIZE C · CODE IDENT NO. 99974 · 1026125
APPROVAL	CCB APPROVAL 10/7/66	SCALE — · SHEET 1 OF 1

REVISIONS TDRR 31563

ZONE	LTR	DESCRIPTION	CHG. NO.	DATE	APPD

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327.

2. MATERIAL: MYLAR TAPE 1.000±.003 WIDTH 3.500±.003 MILS THICK.

3. ✱ DENOTES OPERATIONAL CHECK OUT PROCEDURE.

QTY	K START NO. AND REVISION	PROCESS SPEC. AND/OR OCP ✱	TITLE	EFF
2	603LTA8-K10512-00	LAV-560-809	ACS TIME DELAY TAPE	LTA8

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
2 PLACE DECIMALS + −
3 PLACE DECIMALS + −
ANGLES + −
DO NOT SCALE THIS DRAWING
MATERIAL SEE NOTE 2
APPROVAL

AC ELECTRONICS DIVISION
GENERAL MOTORS CORP. MILWAUKEE WIS.
DRAWN D. DEKU DATE 26 SEPT 66
CHECKED D. WERGINZ
APPROVAL G. E. Bergman 3 OCT 66
CONTRACT NAS 9-497
NASA APPROVAL
CCB APPROVAL 11/17/66

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

K-START TAPE ASSEMBLY

SIZE C
CODE IDENT NO. 99974
1026127
SCALE
SHEET 1 OF 1

1026128

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327.

2. MATERIAL: MYLAR TAPE 1.000 ± .003 WIDTH 3.500 ± .003 MILS THICK.

3. ✳ DENOTES OPERATIONAL CHECK OUT PROCEDURE.

REVISIONS TDMC 32043					
ZONE	LTR	DESCRIPTION	CHG. NO.	DATE	APPD

QTY	K START NO. AND REVISION	PROCESS SPEC. AND/OR OCP ✳	TITLE	EFF
2	G03L001-K10501-00	LAV-560-809	DESCENT / DRY CYCLE PROFILE	L001

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
2 PLACE DECIMALS ± ___
3 PLACE DECIMALS ± ___
ANGLES ± ___
DO NOT SCALE THIS DRAWING
MATERIAL SEE NOTE 2
APPROVAL

AC ELECTRONICS DIVISION
GENERAL MOTORS CORP. MILWAUKEE WIS.
DRAWN D. DEKU DATE 26 SEPT 66
CHECKED D. WERGINZ
APPROVAL G. E. Bergman 3 Oct 66
CONTRACT NAS 9-497
NASA APPROVAL
CCB APPROVAL 11/22/66

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

K-START TAPE ASSEMBLY

SIZE C
CODE IDENT NO. 99974
1026128
SCALE —
SHEET 1 OF 1

MIL 1052C P

REVISIONS TDM 32049					
ZONE	LTR	DESCRIPTION	CHG. NO.	DATE	APPD

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327.
2. MATERIAL: MYLAR TAPE 1.000±.003 WIDTH 3.500±.003 MILS THICK.
3. ✳ DENOTES OPERATIONAL CHECK OUT PROCEDURE.

QTY	K START NO. AND REVISION	PROCESS SPEC. AND/OR OCP ✳	TITLE	EFF
2	G03L001-K10511-00	LAV-560-809	DESCENT PROFILE -LEM FCS	L001

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ON 2 PLACE DECIMALS + ___ − 3 PLACE DECIMALS + ___ − ANGLES + ___ −	AC ELECTRONICS DIVISION GENERAL MOTORS CORP. MILWAUKEE WIS.	MANNED SPACECRAFT CENTER HOUSTON, TEXAS	
DO NOT SCALE THIS DRAWING	DRAWN D. DEKU DATE 27SEPT 66 CHECKED D. WERGINZ APPROVAL G.E. Bergman 3 OCT 66 CONTRACT NAS 9-4971	K-START TAPE ASSEMBLY	
MATERIAL SEE NOTE 2	NASA APPROVAL	SIZE C	CODE IDENT NO. 99974
APPROVAL	CCA APPROVAL 11/2/66	SCALE —	1026134
			SHEET 1 OF 1

REVISIONS TDRR 31494					
ZONE	LTR	DESCRIPTION	CHG. NO.	DATE	APPD
	A	REVISED PER TDRR 31705		3NOV66	DG JAC

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327.
2. MATERIAL: MYLAR TAPE 1.000±.003 WIDTH 3.500±.003 MILS THICK.
3. * DENOTES OPERATIONAL CHECK OUT PROCEDURE.

QTY	K START NO. AND REVISION	PROCESS SPEC. AND/OR OCP *	TITLE	EFF
2	N05CTV1-K10513-00	—— MA0201-5452	KST TAPE COMBINED SYSTEM TEST	2TV1
2	N05CTV1-K10513-01	—— MA0201-5452	KST TAPE COMBINED SYSTEM TEST	2TV1

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ON 2 PLACE DECIMALS + — − 3 PLACE DECIMALS + — − ANGLES + — −	AC ELECTRONICS DIVISION GENERAL MOTORS CORP. MILWAUKEE WIS.	MANNED SPACECRAFT CENTER HOUSTON, TEXAS
DO NOT SCALE THIS DRAWING	DRAWN J. Imbordino DATE 4 OCT. '66 CHECKED Don Witonki APPROVAL G. E. Bergman 7 OCT 66 CONTRACT NAS 9-497	K-START TAPE ASSEMBLY
MATERIAL SEE NOTE 2	NASA APPROVAL	SIZE C CODE IDENT NO. 99974 1026136
APPROVAL	MIT APPROVAL 10/12/66	SCALE —— SHEET 1 OF 1

MIL 1052C P

REVISIONS TDAR 31494

ZONE	LTR	DESCRIPTION	CHG. NO.	DATE	APPD

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327.

2. MATERIAL: MYLAR TAPE 1.000±.003 WIDTH 3.500±.003 MILS THICK.

3. ✳ DENOTES OPERATIONAL CHECK OUT PROCEDURE.

QTY	K START NO. AND REVISION	PROCESS SPEC. AND/OR OCP ✳	TITLE	EFF
2	N05CTV1-K10513-00	——— MA0201-5452	KST TAPE COMBINED SYSTEM TEST	2TV1

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ON 2 PLACE DECIMALS ± ___ 3 PLACE DECIMALS ± ___ ANGLES ± ___	AC ELECTRONICS DIVISION GENERAL MOTORS CORP. MILWAUKEE WIS.	MANNED SPACECRAFT CENTER HOUSTON, TEXAS
DO NOT SCALE THIS DRAWING	DRAWN J. Imbordino DATE 4 OCT. '66 CHECKED Don Witonski APPROVAL G. E. Bergman 7 OCT 66 CONTRACT NAS 9-497	K-START TAPE ASSEMBLY
MATERIAL SEE NOTE 2	NASA APPROVAL	SIZE C · CODE IDENT NO. 99974 · 1026136
APPROVAL	MIT APPROVAL 10/12/66	SCALE ——— · SHEET 1 OF 1

MIL-1052C P

REVISIONS TDRR 33032					
ZONE	LTR	DESCRIPTION	CHG. NO.	DATE	APPD

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327.
2. MATERIAL: MYLAR TAPE 1.000±.003 WIDTH 3.500±.003 MILS THICK.
3. ✳ DENOTES OPERATIONAL CHECK OUT PROCEDURE.

QTY	K START NO. AND REVISION	PROCESS SPEC. AND/OR OCP ✳	TITLE	EFF
2	F03L001-K10515-00	LMO-685-55	MATED SYSTEMS CHECKOUT	LEM 1

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ON 2 PLACE DECIMALS + — − 3 PLACE DECIMALS + — − ANGLES + — −	**AC ELECTRONICS DIVISION** GENERAL MOTORS CORP. MILWAUKEE WIS.	MANNED SPACECRAFT CENTER HOUSTON, TEXAS		
	DRAWN J. Goff DATE 26 JAN 67 CHECKED G. E. Bergman 22FEB 67 APPROVAL G. E. Bergman 22FEB67 CONTRACT NAS 9-497	K-START TAPE ASSEMBLY (F03L001-K10515)		
DO NOT SCALE THIS DRAWING				
MATERIAL SEE NOTE 2	NASA APPROVAL	SIZE C	CODE IDENT NO. 99974	1026141
APPROVAL	CCB APPROVAL 2/22/67	SCALE —		SHEET 1 OF 1

REVISIONS TORR 33031					
ZONE	LTR	DESCRIPTION	CHG. NO.	DATE	APPD

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327.
2. MATERIAL: MYLAR TAPE 1.000±.003 WIDTH 3.500±.003 MILS THICK.
3. ✱ DENOTES OPERATIONAL CHECK OUT PROCEDURE.

QTY	K START NO. AND REVISION	PROCESS SPEC. AND/OR OCP ✱	TITLE	EFF
2	F03L001- K10516-00	LMO-685-55	STAGED SYSTEMS CHECKOUT	LEM 1

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
2 PLACE DECIMALS + ___ − ___
3 PLACE DECIMALS + ___ − ___
ANGLES + ___ − ___
DO NOT SCALE THIS DRAWING
MATERIAL SEE NOTE 2
APPROVAL

AC ELECTRONICS DIVISION
GENERAL MOTORS CORP. MILWAUKEE WIS.
DRAWN J. Goff DATE 26 JAN 67
CHECKED G. E. Bergman 2/22/67
APPROVAL G. E. Bergman 2/22/67
CONTRACT NAS 9-497
NASA APPROVAL W. J. [illegible]
CCB APPROVAL [illegible] 2/22/67

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

K-START TAPE ASSEMBLY
(F03L001-K10516)

SIZE C
CODE IDENT NO. 99974
1026142
SCALE —
SHEET 1 OF 1

MIL 1052C P

REVISIONS TORR 33033

ZONE	LTR	DESCRIPTION	CHG. NO.	DATE	APPD

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327.
2. MATERIAL: MYLAR TAPE 1.000±.003 WIDTH 3.500±.003 MILS THICK.
3. ✳ DENOTES OPERATIONAL CHECK OUT PROCEDURE.

QTY	K START NO. AND REVISION	PROCESS SPEC. AND/OR OCP ✳	TITLE	EFF
2	F03L001-K10517-00	LMO-685-55	VALVE SIGNATURE JETSET PROFILE	LEM 1

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
2 PLACE DECIMALS ± 3 PLACE DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING
MATERIAL SEE NOTE 2
APPROVAL

AC ELECTRONICS DIVISION
GENERAL MOTORS CORP. MILWAUKEE WIS.
DRAWN J. Graff DATE 26 JAN '67
CHECKED G.E. Bergman 2/22/67
APPROVAL G.E. Bergman 2/22/67
CONTRACT NAS 9-497
NASA APPROVAL
CCB APPROVAL 2/22/67

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

K-START TAPE
ASSEMBLY
(F03L001-K10517)

SIZE C
CODE IDENT NO. 99974
1026143
SCALE —
SHEET 1 OF 1

MIL 1052C P

REVISIONS TDRR 33973					
ZONE	LTR	DESCRIPTION	CHG. NO.	DATE	APPD

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327.
2. MATERIAL: MYLAR TAPE 1.000±.003 WIDTH 3.500±.003 MILS THICK.
3. ✳ DENOTES OPERATIONAL CHECK OUT PROCEDURE.

QTY	K START NO. AND REVISION	PROCESS SPEC. AND/OR OCP ✳	TITLE	EFF
2	G03L002 K10502-00	LAV-561-210	ALT/ALT RATE METER TEST	LEM 2 & SUBQ

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ON 2 PLACE DECIMALS ± ___ 3 PLACE DECIMALS ± ___ ANGLES ± ___	AC ELECTRONICS DIVISION GENERAL MOTORS CORP MILWAUKEE WIS	MANNED SPACECRAFT CENTER HOUSTON, TEXAS
DO NOT SCALE THIS DRAWING	DRAWN L. Tanko DATE 4 APR 67 CHECKED J. [illegible] 9-6-67 APPROVAL R. [illegible] CONTRACT NAS 9-497	K-START TAPE ASSEMBLY (G03L002-K10502)
MATERIAL SEE NOTE 2.	NASA APPROVAL	SIZE C · CODE IDENT NO. 99974 · 1026153
APPROVAL	CCB APPROVAL	SCALE ——— · SHEET 1 OF 1

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327.
2. MATERIAL: MYLAR TAPE 1.000±.003 WIDTH 3.500±.003 MILS THICK.
3. ✱ DENOTES OPERATIONAL CHECK OUT PROCEDURE.

REVISIONS					
ZONE	LTR	DESCRIPTION		DATE	APPD
		INITIAL RELEASE TDRR 34156	CHG. NO.		

QTY	K START NO. AND REVISION	PROCESS SPEC. AND/OR OCP ✱	TITLE	EFF
2	G03L004- K10523-00	LAV-561-225	RCS NO FAIL TEST	LM-4

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ON 2 PLACE DECIMALS ± ___ 3 PLACE DECIMALS ± ___ ANGLES ± ___	AC ELECTRONICS DIVISION GENERAL MOTORS CORP. MILWAUKEE WIS.	MANNED SPACECRAFT CENTER HOUSTON TEXAS			
	DRAWN R. Tanko DATE 8 MAY 67	K-START TAPE ASSEMBLY (G03L004-K10523)			
	CHECKED R Wasser 11 MAY 67				
	APPROVAL R. Lemmon				
DO NOT SCALE THIS DRAWING	CONTRACT NAS 9-497				
MATERIAL SEE NOTE 2.	NASA APPROVAL R. Jaxt	SIZE C	CODE IDENT NO. 99974	1026158	
APPROVAL	CCB ~~MIT~~ APPROVAL S. Bass 7-12-67	SCALE —			SHEET 1 OF 1

1026167 A

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327.
2. MATERIAL: MYLAR TAPE 1.000 ±.003 WIDE BY 3.5 ±.3 MILS THICK.
3. * DENOTES OPERATIONAL CHECK OUT PROCEDURE.

REVISIONS TDRR 36286

SYM	DESCRIPTION	CHG NO.	DATE	APPD.
A	REVISED PER TDRR 36848		22 SEP 68	

QTY	K-START NO. AND REVISION	PROCESS SPEC. AND/OR OCP*	TITLE	EFF
2	F08C101-K10528-00	KSC SP-183	I. U. INTERFACE	C101
2	F08C101-K10528-01	KSC SP-183	I. U. INTERFACE	C101

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS + − DECIMALS + − ANGLES + −
DO NOT SCALE THIS DRAWING
MATERIAL SEE NOTE 2
APPROVAL

AC ELECTRONICS DIVISION
GENERAL MOTORS CORP. MILWAUKEE WIS.
DRAWN J. REPINSKI DATE 16 MAY 68
CHECKED 21 MAY '68
APPROVAL O. Korslin
CONTRACT NAS 9-497
NASA APPROVAL
CCB APPROVAL

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

K-START TAPE
ASSEMBLY
I. U. INTERFACE

SIZE B
CODE IDENT NO. 99974
1026167
SCALE —
SHEET 1 OF 1

MIL 10778 D 11 16 64

A 1026169

REVISIONS TDRR 36437

SYM	DESCRIPTION	CHG NO.	DATE	APPD.
A	REVISED PER TDRR 36574		29 JUL 68	JJJ

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327.

2. MATERIAL: MYLAR TAPE 1.000 ± .003 WIDE BY 3.5 ± .3 MILS THICK.

3. * DENOTES OPERATIONAL CHECK OUT PROCEDURE.

QTY	K-START NO. AND REVISION	PROCESS SPEC. AND/OR OCP *	TITLE	EFF
2	F07L003 K10515-01	———	MATED SYSTEMS C/O	LM-3

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS DECIMALS ANGLES
± — ± — ± —
DO NOT SCALE THIS DRAWING
MATERIAL SEE NOTE 2
APPROVAL

AC ELECTRONICS DIVISION
GENERAL MOTORS CORP MILWAUKEE WIS
DRAWN W. REPINSKI DATE 16 MAY 68
CHECKED 21 May 68
APPROVAL O Korslin
CONTRACT NAS 9-497
NASA APPROVAL 6/25/68
APPROVAL 6/27/

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

K-START TAPE
ASSEMBLY
MATED SYSTEMS C/O

SIZE B
CODE IDENT NO. 99974
1026169
SCALE ———
SHEET 1 OF 1

MIL 10778-D 11-16-64

6919201

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327.
2. MATERIAL: MYLAR TAPE 1.000 ± .003 WIDE BY 3.5 ± .3 MILS THICK.
3. * DENOTES OPERATIONAL CHECK OUT PROCEDURE.

REVISIONS TDRR 36437

SYM	DESCRIPTION	CHG NO.	DATE	APPD.

QTY	K-START NO. AND REVISION	PROCESS SPEC. AND/OR OCP *	TITLE	EFF
2	F07L003 K 10515-00	———	MATED SYSTEMS C/O	LM-3

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING
MATERIAL SEE NOTE 2
APPROVAL

AC ELECTRONICS DIVISION
GENERAL MOTORS CORP. MILWAUKEE WIS.
DRAWN J. REPINSKI DATE 16 MAY 68
CHECKED 21 May 68
APPROVAL O Korslin
CONTRACT NAS 9-497
NASA APPROVAL 6/25/68
APPROVAL 6/27/6

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

K-START TAPE
ASSEMBLY
MATED SYSTEMS C/O

SIZE B
CODE IDENT NO. 99974
1026169
SCALE ———
SHEET 1 OF 1

MIL 10778 D 11 16 64

0619201

REVISIONS TDRR 36438				
SYM	DESCRIPTION	CHG NO.	DATE	APPD.

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327.
2. MATERIAL: MYLAR TAPE 1.000 ± .003 WIDE BY 3.5 ± .3 MILS THICK.
3. * DENOTES OPERATIONAL CHECK OUT PROCEDURE.

QTY	K-START NO. AND REVISION	PROCESS SPEC. AND/OR OCP *	TITLE	EFF
2	F076003 K10516-00	———	STAGED SYSTEMS C/O	LM-3

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON

FRACTIONS	DECIMALS	ANGLES
+ −	+ −	+ −
− −	− −	− −

DO NOT SCALE THIS DRAWING

MATERIAL SEE NOTE 2

APPROVAL

AC ELECTRONICS DIVISION
GENERAL MOTORS CORP. MILWAUKEE WIS.

DRAWN J. REPINSKI DATE 16 MAY 68
CHECKED J. Powa 21 May '68
APPROVAL O Korolin
CONTRACT NAS 9-497
NASA APPROVAL S.L. Bachelor 6/25/68
APPROVAL 6/26/68

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

K-START TAPE
ASSEMBLY
STAGED SYSTEMS C/O

SIZE B
CODE IDENT NO. 99974
1026170

SCALE ——
SHEET 1 OF 1

MIL 10778 D 11 16 64

1L19201

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327.
2. MATERIAL: MYLAR TAPE 1.000 ±.003 WIDE BY 3.5 ±.3 MILS THICK.
3. * DENOTES OPERATIONAL CHECK OUT PROCEDURE.

REVISIONS TDRR 36439

SYM	DESCRIPTION	CHG NO.	DATE	APPD.

QTY	K-START NO. AND REVISION	PROCESS SPEC. AND/OR OCP *	TITLE	EFF
2	F07L003 K10517-00	—	VALVE SIG. PROFILE	LM-3

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS DECIMALS ANGLES
± ± ±
DO NOT SCALE THIS DRAWING

MATERIAL
SEE NOTE 2

APPROVAL

AC ELECTRONICS DIVISION
GENERAL MOTORS CORP. MILWAUKEE WIS.

DRAWN J. REPINSKI DATE 16 MAY 68
CHECKED J M Powers 21 MAY 68
APPROVAL O. Korslin
CONTRACT NAS 9-497
NASA APPROVAL
APPROVAL 4/27/68

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

K-START TAPE
ASSEMBLY
VALVE SIG. PROFILE

SIZE B
CODE IDENT NO. 99974
1026171
SCALE —
SHEET 1 OF 1

MIL 1077B D-1 16 64

2L19201

REVISIONS TDRR 36440				
SYM	DESCRIPTION	CHG NO.	DATE	APPD.

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327.
2. MATERIAL: MYLAR TAPE 1.000 ± .003 WIDE BY 3.5 ± .3 MILS THICK.
3. * DENOTES OPERATIONAL CHECK OUT PROCEDURE.

QTY	K-START NO. AND REVISION	PROCESS SPEC. AND/OR OCP *	TITLE	EFF
2	F07L003-✓ K10525-00	←	ROLL/YAW JETS DRYCYCLE ✓	LM-3 ✓

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS + − − − DECIMALS + − − − ANGLES + − − −
DO NOT SCALE THIS DRAWING
MATERIAL SEE NOTE 2
APPROVAL

AC ELECTRONICS DIVISION
GENERAL MOTORS CORP. MILWAUKEE WIS.
DRAWN J. REPINSKI DATE 17 MAY 68
CHECKED J.K. Power 21 May 68
APPROVAL O Korslin
CONTRACT NAS 9-497
NASA APPROVAL 4/5/68
[illegible] APPROVAL 6/27/68

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

K-START TAPE
ASSEMBLY
ROLL/YAW JETS DRYCYCLE

SIZE B
CODE IDENT NO. 99974
1026172
SCALE —
SHEET 1 OF 1

MIL 10778-D 11-16-64

EL19201

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327.
2. MATERIAL: MYLAR TAPE 1.000 ± .003 WIDE BY 3.5 ± .3 MILS THICK.
3. * DENOTES OPERATIONAL CHECK OUT PROCEDURE.

REVISIONS TDRR 36441

SYM	DESCRIPTION	CHG NO.	DATE	APPD.

QTY	K-START NO. AND REVISION	PROCESS SPEC. AND/OR OCP *	TITLE	EFF
2 ✓	F07L003- ✓ K10530-00	———	LMSAMOD ✓ (CDU OP CHK)	LM-3 ✓

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS DECIMALS ANGLES
+ − \+ − \+ −
DO NOT SCALE THIS DRAWING
MATERIAL SEE NOTE 2
APPROVAL

AC ELECTRONICS DIVISION
GENERAL MOTORS CORP. MILWAUKEE WIS.
DRAWN J. REPINSKI DATE 17 MAY 68
CHECKED JK Power 21 MAY 68
APPROVAL O. Korslin
CONTRACT NAS 9-497
NASA APPROVAL SL Bachelder 6/25/68
MIT APPROVAL En Aust 4/20/68

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

K-START TAPE
ASSEMBLY
LM5AMOD(CDU OP CHK)

SIZE B
CODE IDENT NO. 99974
1026173
SCALE ——
SHEET 1 OF 1

MIL 10778 D 11 16 64

-bL19201

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327.
2. MATERIAL: MYLAR TAPE 1.000 ±.003 WIDE BY 3.5 ±.3 MILS THICK.
3. * DENOTES OPERATIONAL CHECK OUT PROCEDURE.

REVISIONS TDRR 36442

SYM	DESCRIPTION	CHG NO.	DATE	APPD.

QTY	K-START NO. AND REVISION	PROCESS SPEC. AND/OR OCP*	TITLE	EFF
2	F07L003 K10531-00	———	LM G+N OPERATIONAL	LM-3

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON

FRACTIONS	DECIMALS	ANGLES
+ —	+ —	+ —
— —	— —	— —

DO NOT SCALE THIS DRAWING

MATERIAL SEE NOTE 2

APPROVAL

AC ELECTRONICS DIVISION
GENERAL MOTORS CORP. MILWAUKEE WIS.

DRAWN J. REPINSKI DATE 17 MAY 68
CHECKED 21 May 68
APPROVAL
CONTRACT NAS 9-497
NASA APPROVAL
APPROVAL

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

K-START TAPE
ASSEMBLY
LM G+N OPERATIONAL

SIZE	CODE IDENT NO.	
B	99974	1026174

SCALE ——

SHEET 1 OF 1

MIL 10778 D 11 16 64

5L19201

REVISIONS TDRR 36443				
SYM	DESCRIPTION	CHG NO.	DATE	APPD.

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327.
2. MATERIAL: MYLAR TAPE 1.000 ± .003 WIDE BY 3.5 ± .3 MILS THICK.
3. * DENOTES OPERATIONAL CHECK OUT PROCEDURE.

QTY	K-START NO. AND REVISION	PROCESS SPEC. AND/OR OCP *	TITLE	EFF
2	F07L003 K10532-00	——	RCS CWEA-1	LM-3

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± — DECIMALS ± — ANGLES ± —
DO NOT SCALE THIS DRAWING

MATERIAL SEE NOTE 2

APPROVAL

AC ELECTRONICS DIVISION
GENERAL MOTORS CORP. MILWAUKEE WIS.

DRAWN J. REPINSKI DATE 17 MAY 68
CHECKED 21 MAY 68
APPROVAL O. Koralin
CONTRACT NAS 9-497
NASA APPROVAL 4/25/68
APPROVAL 4/7/6

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

K-START TAPE
ASSEMBLY
RCS CWEA-1

SIZE B
CODE IDENT NO. 99974
1026175
SCALE ——
SHEET 1 OF 1

MIL 10778-D 11-16-64

9L19201

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327.
2. MATERIAL: MYLAR TAPE 1.000 ± .003 WIDE BY 3.5 ± .3 MILS THICK.
3. * DENOTES OPERATIONAL CHECK OUT PROCEDURE.

REVISIONS TDRR 36444

SYM	DESCRIPTION	CHG NO.	DATE	APPD.

QTY	K-START NO. AND REVISION	PROCESS SPEC. AND/OR OCP *	TITLE	EFF
2	F07L003- K10533-00	—	RCS CWEA-2	LM-3

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± — DECIMALS ± — ANGLES ± —
DO NOT SCALE THIS DRAWING
MATERIAL SEE NOTE 2
APPROVAL

AC ELECTRONICS DIVISION
GENERAL MOTORS CORP. MILWAUKEE WIS.

DRAWN J. REPINSKI DATE 17 MAY 68
CHECKED J K Power 21 MAY 68
APPROVAL O Korslin
CONTRACT NAS 9-497
NASA APPROVAL S L Beckman 4/26/6
APPROVAL 6/27/64

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

K-START TAPE ASSEMBLY
✓ RCS CWEA-2

SIZE B
CODE IDENT NO. 99974
1026176 ✓
SCALE —
SHEET 1 OF 1

MIL 10778 D 11 16 64

LL19201

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327.
2. MATERIAL: MYLAR TAPE 1.000 ±.003 WIDE BY 3.5 ±.3 MILS THICK.
3. * DENOTES OPERATIONAL CHECK OUT PROCEDURE.

REVISIONS TDRR 36445

SYM	DESCRIPTION	CHG NO.	DATE	APPD.

QTY	K-START NO. AND REVISION	PROCESS SPEC. AND/OR OCP *	TITLE	EFF
2	F07L003- ✓ K10534-00 ✓	———	RCS CWEA-3 ✓	LM-3 ✓

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS + — — —
DECIMALS + — — —
ANGLES + — — —
DO NOT SCALE THIS DRAWING
MATERIAL SEE NOTE 2
APPROVAL

AC ELECTRONICS DIVISION
GENERAL MOTORS CORP. MILWAUKEE WIS.
DRAWN J. REPINSKI DATE 17MAY68
CHECKED J M Power 21MAY68
APPROVAL O Korslin
CONTRACT NAS 9-497
NASA APPROVAL S L Bachman 6/5/68
[redacted] APPROVAL 6/25/68

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

K-START TAPE
ASSEMBLY
RCS CWEA-3

SIZE B
CODE IDENT NO. 99974
1026177
SCALE ———
SHEET 1 OF 1

MIL 10778-D 11-16-64

1026178

REVISIONS TDRR 36446

SYM	DESCRIPTION	CHG NO.	DATE	APPD.

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327.
2. MATERIAL: MYLAR TAPE 1.000 ± .003 WIDE BY 3.5 ± .3 MILS THICK.
3. * DENOTES OPERATIONAL CHECK OUT PROCEDURE.

QTY	K-START NO. AND REVISION	PROCESS SPEC. AND/OR OCP *	TITLE	EFF
2	F07L003 - K10535-00 -	———	LM FDAI TOT-ATT/ATT-ERR	LM-3

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON

FRACTIONS	DECIMALS	ANGLES
+ −	+ −	+ −
− −	− −	− −

DO NOT SCALE THIS DRAWING

MATERIAL SEE NOTE 2

APPROVAL

AC ELECTRONICS DIVISION
GENERAL MOTORS CORP. MILWAUKEE WIS.

DRAWN J. REPINSKI DATE 20 MAY 68
CHECKED Jh Power 21 MAY 68
APPROVAL O. Korolin
CONTRACT NAS 9-497
NASA APPROVAL 6/25/68
APPROVAL 6-7/68

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

K-START TAPE
ASSEMBLY
LM FDAI TOT-ATT/ATT-ERR -

SIZE B
CODE IDENT NO. 99974
1026178 -
SCALE ——
SHEET 1 OF 1

MIL 10778-D 11-16-64

0819201

REVISIONS TDRR 36447

SYM	DESCRIPTION	CHG NO.	DATE	APPD.

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327.
2. MATERIAL: MYLAR TAPE 1.000 ±.003 WIDE BY 3.5 ±.3 MILS THICK.
3. * DENOTES OPERATIONAL CHECKOUT PROCEDURE.

QTY	K-START NO. AND REVISION	PROCESS SPEC. AND/OR OCP*	TITLE	EFF
2	F07L003- K10518-00	——	LMACA-LGC I/F	LM-3

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± — DECIMALS ± — ANGLES ± —
DO NOT SCALE THIS DRAWING

MATERIAL SEE NOTE 2

APPROVAL

AC ELECTRONICS DIVISION
GENERAL MOTORS CORP. MILWAUKEE WIS.

DRAWN J. REPINSKI DATE 20 MAY 68
CHECKED J K Down 21 MAY 68
APPROVAL O Korsli
CONTRACT NAS 9-497
NASA APPROVAL S L Beckman 6/25/68
APPROVAL E Aust 6/25/68

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

K-START TAPE
ASSEMBLY
LM ACA-LGC I/F

SIZE B
CODE IDENT NO. 99974
1026180
SCALE ——
SHEET 1 OF 1

MIL 10778-D 11-18-64

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327.
2. MATERIAL: MYLAR TAPE 1.000 ±.003 WIDE BY 3.5 ±.3 MILS THICK.
3. * DENOTES OPERATIONAL CHECK OUT PROCEDURE.

REVISIONS TDRR 36436

SYM	DESCRIPTION	CHG NO.	DATE	APPD.

QTY	K-START NO. AND REVISION	PROCESS SPEC. AND/OR OCP *	TITLE	EFF
2	F07L003 K10538-00	——	LGC SELF TEST	LM-3

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON

FRACTIONS	DECIMALS	ANGLES
+ —	+ —	+ —
- —	- —	- —

DO NOT SCALE THIS DRAWING

MATERIAL SEE NOTE 2

APPROVAL

AC ELECTRONICS DIVISION
GENERAL MOTORS CORP. MILWAUKEE WIS.

DRAWN J. REPINSKI DATE 24 JUN 68
CHECKED 25 June '68
APPROVAL
CONTRACT NAS 9-497
NASA APPROVAL S. L. Bachman 6/25/68
APPROVAL 4/27/68

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

K-START TAPE
ASSEMBLY
LGC SELF TEST

SIZE B
CODE IDENT NO. 99974
1026185

SCALE ——
SHEET 1 OF 1

MIL 10778-D 11-16-64

1026186

REVISIONS TDRR 36435

SYM	DESCRIPTION	CHG NO.	DATE	APPD.

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327.
2. MATERIAL: MYLAR TAPE 1.000 ±.003 WIDE BY 3.5 ±.3 MILS THICK.
3. * DENOTES OPERATIONAL CHECK OUT PROCEDURE.

QTY	K-START NO. AND REVISION	PROCESS SPEC. AND/OR OCP *	TITLE	EFF
2	F07L003 K10539-00	———	RCS C+W I/F	LM-3

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS DECIMALS ANGLES
+ — + — + —
— — — — — —
DO NOT SCALE THIS DRAWING

MATERIAL SEE NOTE 2

APPROVAL

AC ELECTRONICS DIVISION
GENERAL MOTORS CORP. MILWAUKEE WIS.

DRAWN J. REPINSKI DATE 24 JUN 68
CHECKED K S Komanske 25 Jun 68
APPROVAL O Korolin
CONTRACT NAS 9-497
NASA APPROVAL S L Bachman
APPROVAL 4/10

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

K-START TAPE ASSEMBLY
RCS C+W I/F

SIZE B
CODE IDENT NO. 99974
1026186
SCALE ———
SHEET 1 OF 1

MIL 10778 D 11 16 64

1026193

REVISIONS TDRR 36813				
SYM	DESCRIPTION	CHG NO.	DATE	APPD.

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327.
2. MATERIAL: MYLAR TAPE 1.000 ±.003 WIDE BY 3.5 ±.3 MILS THICK.
3. * DENOTES OPERATIONAL CHECKOUT PROCEDURE.

QTY	K-START NO. AND REVISION	PROCESS SPEC AND/OR OCP*	TITLE	EFF
2	G03L005- K10540-00	-	SAMOD INHINT GUARD	LM 5

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON

FRACTIONS	DECIMALS	ANGLES
+ -	+ -	+ -
- -	- -	- -

DO NOT SCALE THIS DRAWING
MATERIAL SEE NOTE 2
CONTRACT NAS 9-497

AC ELECTRONICS DIVISION
GENERAL MOTORS CORP. MILWAUKEE WIS.
DRAWN L.C. [illegible] DATE 14 AUG68
CHECKED J. REPINSKI 14 AUG 68
APPROVAL D. Korslin
APPROVAL
NASA APPROVAL
APPROVAL 9/10/68

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

K-START TAPE ASSEMBLY -
SAMOD INHINT GUARD

CODE IDENT NO.	SIZE	
99974	B	1026193
SCALE -		SHEET 1 OF 1

MIL 10778-D 11-16-64

1026196

REVISIONS TDRR 36945

SYM	DESCRIPTION	CHG NO.	DATE	APPD

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327.
2. MATERIAL: MYLAR TAPE 1.000 ±.003 WIDE BY 3.5 ±.3 MILS THICK.
3. * DENOTES OPERATIONAL CHECK OUT PROCEDURE.

QTY	K-START NO. AND REVISION	PROCESS SPEC. AND/OR OCP *	TITLE	EFF
2	F109C103-K10528-00	-	I.U. INTERFACE	S/C 103

NEXT ASSY	USED ON

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON

FRACTIONS	DECIMALS	ANGLES
+ —	+ —	+ —
— —	— —	— —

DO NOT SCALE THIS DRAWING

MATERIAL SEE NOTE 2

APPROVAL

AC ELECTRONICS DIVISION
GENERAL MOTORS CORP. MILWAUKEE WIS

DRAWN Power DATE 21 OCT. '68
CHECKED P G Heise 22 OCT 68
APPROVAL C Kosl
CONTRACT NAS 9-497
NASA APPROVAL
APPROVAL 10/24/68

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

K-START TAPE
ASSEMBLY,
I.U. INTERFACE

SIZE	CODE IDENT NO.	
B	99974	1026196

SCALE —— SHEET 1 OF 1

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327.
2. MATERIAL: MYLAR TAPE 1.000 ±.003 WIDE BY 3.5 ±.3 MILS THICK.

REVISIONS

SYM	DESCRIPTION	CHG NO.	DATE	APPD.
A	REVISED PER DO 66997		14 Nov 68	LGC
B	INITIAL RELEASE TORR 37052		19 Nov 68	

QTY	K-START NO. AND REVISION	AGC PROGRAM	TITLE	EFF.
2	F09C104-K10527-00	COLOSSUS 249	GN+C INTERFACE	S/C104

NEXT ASSY	USED ON

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON

FRACTIONS	DECIMALS	ANGLES
±	±	±

DO NOT SCALE THIS DRAWING

MATERIAL SEE NOTE 2

APPROVAL

AC ELECTRONICS DIVISION
GENERAL MOTORS CORP. MILWAUKEE WIS.

DRAWN A. SANDERSON DATE 12 NOV 68
CHECKED J. REPINSKI 13 NOV 68
APPROVAL O. Korsli
CONTRACT NAS 9-497
NASA APPROVAL R. Jarst
APPROVAL

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

K-START TAPE
ASSEMBLY
GN + C INTERFACE

SIZE B
CODE IDENT NO. 99974
1026204
SCALE —
SHEET 1 OF 1

1026204 C

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327.
2. MATERIAL: MYLAR TAPE 1.000 ±.003 WIDE BY 3.5 ±.3 MILS THICK.

REVISIONS

SYM	DESCRIPTION	CHG NO.	DATE	APPD.
A	REVISED PER DO 66997		19 Nov 68	LGC R.C.A
B	INITIAL RELEASE TORR 37052		19 Nov 68	
C	REVISED PER TDRR 37201		16-Jan 69	

QTY	K-START NO. AND REVISION	AGC PROGRAM	TITLE	EFF
2	F09C104-K10527-00	COLOSSUS 249	GN+C INTERFACE	S/C104
2	F09C104-K10527-01	COLOSSUS 249	GN&C INTERFACE	CM 104

NEXT ASSY	USED ON

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± — DECIMALS ± — ANGLES ± —
DO NOT SCALE THIS DRAWING

MATERIAL
SEE NOTE 2

APPROVAL

AC ELECTRONICS DIVISION
GENERAL MOTORS CORP. MILWAUKEE WIS.

DRAWN A. SANDERSON DATE 12 NOV 68
CHECKED J. REPINSKI 13 NOV 68
APPROVAL O. Korali
CONTRACT NAS 9-497

NASA APPROVAL R. Jacob
APPROVAL

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

K-START TAPE
ASSEMBLY
GN + C INTERFACE

SIZE B
CODE IDENT NO. 99974
1026204

SCALE —
SHEET 1 OF 1

1026204 | D

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327.
2. MATERIAL: MYLAR TAPE 1.000 ± .003 WIDE BY 3.5 ± .3 MILS THICK.

REVISIONS				
SYM	DESCRIPTION	CHG NO.	DATE	APPD.
A	REVISED PER DO 66997		19 Nov 68	LGC
B	INITIAL RELEASE TDRR 37052		19 Nov 68	
C	REVISED PER TDRR 37201		16-Jan 69	JM
D	REVISED PER TDRR 37250		24 JAN 69	EMS

QTY	K-START NO. AND REVISION	AGC PROGRAM	TITLE	EFF.
2	F09C104-K10527-00	COLOSSUS 249	GN+C INTERFACE	S/C104
2	F09C104-K10527-01	COLOSSUS 249	GN&C INTERFACE	CM 104
2	F09C104-K10527-02	COLOSSUS 249	GN + C INTERFACE	CM 104

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS + − DECIMALS + − ANGLES + −
DO NOT SCALE THIS DRAWING
MATERIAL SEE NOTE 2
APPROVAL

AC ELECTRONICS DIVISION
GENERAL MOTORS CORP. MILWAUKEE WIS.
DRAWN A. SANDERSON DATE 12 NOV 68
CHECKED J. REPINSKI 13 NOV 68
APPROVAL
CONTRACT NAS 9-497
NASA APPROVAL R. Jacob
~~MT~~ APPROVAL

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

K-START TAPE
ASSEMBLY
GN + C INTERFACE

SIZE B
CODE IDENT NO. 99974
1026204
SCALE ——
SHEET 1 OF 1

MIL 10778 D 11 16 64

1026204 E

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327. Ⓜ
2. MATERIAL: MYLAR TAPE 1.000 ±.003 WIDE BY 3.5 ±.3 MILS THICK.

REVISIONS

SYM	DESCRIPTION	CHG NO.	DATE	APPD.
A	REVISED PER DO 66997		19 NOV 68	LGC
Ⓜ B	INITIAL RELEASE TDRR 37052		19 NOV 68	
C	REVISED PER TDRR 37201		16-JAN 69	
Ⓜ D	REVISED PER TDRR 37250		24 JAN 69	EMS
E	REVISED PER TDRR 37372		28 FEB 69	JJJ

QTY	K-START NO. AND REVISION	AGC PROGRAM	TITLE	EFF
2	F09C104-K10527-00	COLOSSUS 249	GN+C INTERFACE	S/C104
2	F09C104-K10527-01	COLOSSUS 249	GN&C INTERFACE	CM 104
2	F09C104-K10527-02	COLOSSUS 249	GN + C INTERFACE	CM 104
2	F09C104-K10527-03	COLOSSUS 249	GN & C INTERFACE	CM 106

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS + −, − −; DECIMALS + −, − −; ANGLES + −, − −
DO NOT SCALE THIS DRAWING

MATERIAL
SEE NOTE 2

APPROVAL

AC ELECTRONICS DIVISION
GENERAL MOTORS CORP. MILWAUKEE WIS.

DRAWN A. SANDERSON DATE 12 NOV 68
CHECKED J. REPINSKI 13 NOV 68
APPROVAL
CONTRACT NAS 9-497
NASA APPROVAL
~~MIT~~ APPROVAL

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

K-START TAPE
ASSEMBLY
GN + C INTERFACE

SIZE B
CODE IDENT NO. 99974
1026204
SCALE ——
SHEET 1 OF 1

MIL 10778 D 11 16 64

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327.
2. MATERIAL: MYLAR TAPE 1.000 ±.003 WIDE BY 3.5 ±.3 MILS THICK.

REVISIONS

SYM	DESCRIPTION	CHG NO.	DATE	APPD.
A	REVISED PER DO66997		19 Nov 68	LGC R.G.D.
B	*INITIAL RELEASE TDRR 37053*		19 NOV 68	

QTY	K-START NO. AND REVISION	AGC PROGRAM	TITLE	EFF
2	*F09C104-K10528-00*	COLOSSUS 249	*I.U. INTERFACE*	S/C104

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON

FRACTIONS	DECIMALS	ANGLES
+ —	+ —	+ —
— —	— —	— —

DO NOT SCALE THIS DRAWING

MATERIAL
SEE NOTE 2

APPROVAL

AC ELECTRONICS DIVISION
GENERAL MOTORS CORP. MILWAUKEE WIS.

DRAWN A. SANDERSON DATE 12 NOV. 68
CHECKED J. REPINSKI DATE 14 NOV. 68
APPROVAL
CONTRACT NAS 9-497

NASA APPROVAL
~~MIT~~ APPROVAL

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

K-START TAPE
ASSEMBLY
I. U. INTERFACE

SIZE	CODE IDENT NO.	
B	99974	1026205

SCALE —— SHEET *1 OF 1*

MIL 10778 D 11-16-64

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327. Ⓝ

2. MATERIAL: MYLAR TAPE 1.000 ± .003 WIDE BY 3.5 ± .3 MILS THICK.

REVISIONS

SYM	DESCRIPTION	CHG NO.	DATE	APPD.
A	REVISED PER DO66997		19 Nov 68	LGC R.G.A.
B	INITIAL RELEASE TDRR 37053		19 NOV 68	
C	REVISED PER TDRR 37362		25 FEB 69	SA

QTY	K-START NO. AND REVISION	AGC PROGRAM	TITLE	EFF
2	F09C104-K10528-00	COLOSSUS 249	I.U. INTERFACE	S/C104
2	F09C104-K10528-01	COLOSSUS 249	I.U. INTERFACE	CM 104

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± — DECIMALS ± — ANGLES ± —
DO NOT SCALE THIS DRAWING
MATERIAL SEE NOTE 2
APPROVAL

AC ELECTRONICS DIVISION
GENERAL MOTORS CORP. MILWAUKEE WIS.
DRAWN A. SANDERSON DATE 12 NOV. 68
CHECKED J. REPINSKI 14 NOV. 68
APPROVAL
CONTRACT NAS 9-497
NASA APPROVAL
APPROVAL

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

K-START TAPE
ASSEMBLY
I. U. INTERFACE

SIZE B
CODE IDENT NO. 99974
1026205
SCALE —
SHEET 1 OF 1

MIL 10778-D 11-16-64

1026206 | B

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327.
2. MATERIAL: MYLAR TAPE 1.000 ±.003 WIDE BY 3.5 ±.3 MILS THICK.

REVISIONS				
SYM	DESCRIPTION	CHG NO.	DATE	APPD.
A	REVISED PER D066997		19 NOV 68	LGC
B	*INITIAL RELEASE TDRR 37054*		19 NOV 68	

QTY	K-START NO. AND REVISION	AGC PROGRAM	TITLE	EFF
2	F09104-K10529-00	COLOSSUS 249	COUNT DOWN INTERFACE	S/C104

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON

FRACTIONS	DECIMALS	ANGLES
+ —	+ —	+ —
- —	- —	- -

DO NOT SCALE THIS DRAWING

MATERIAL
SEE NOTE 2

APPROVAL

AC ELECTRONICS DIVISION
GENERAL MOTORS CORP. MILWAUKEE WIS.

DRAWN A.SANDERSON DATE 11 NOV. 68
CHECKED J. REPINSKI 14 NOV. 68
APPROVAL
CONTRACT NAS 9-497
NASA APPROVAL
~~MIT~~ APPROVAL

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

K-START TAPE
ASSEMBLY
COUNTDOWN INTERFACE

SIZE	CODE IDENT NO.	
B	99974	1026206

SCALE ——
SHEET 1 OF 1

MIL 10778 D 11-16-64

1026207 C

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327.
2. MATERIAL: MYLAR TAPE 1.000 ±.003 WIDE BY 3.5 ±.3 MILS THICK.

REVISIONS				
SYM	DESCRIPTION	CHG NO.	DATE	APPD.
A	REVISED PER D066997		19 Nov 68	LGC
B	INITIAL RELEASE TDRR 37055		19 Nov 68	
C	REVISED PER TDRR 37328		10 FEB 69	A.N.

QTY	K-START NO. AND REVISION	AGC PROGRAM	TITLE	EFF
2	F09C104-K10531-00	COLOSSUS 249	CMG & N OPERATIONAL	S/C104
2	F09C104-K10531-01	COLOSSUS 249	CMG & N OPERATIONAL	CM104

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± — DECIMALS ± — ANGLES ± —
DO NOT SCALE THIS DRAWING

MATERIAL
SEE NOTE 2

APPROVAL

AC ELECTRONICS DIVISION
GENERAL MOTORS CORP. MILWAUKEE WIS.

DRAWN A. SANDERSON DATE 11 NOV 68
CHECKED J. REPINSKI 14 NOV 68
APPROVAL O. Koslin
CONTRACT NAS 9-497
NASA APPROVAL R. Jacob
APPROVAL

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

K-START TAPE ASSEMBLY
CM G + N OPERATIONAL

SIZE B
CODE IDENT NO. 99974
1026207
SCALE —
SHEET 1 OF 1

MIL 10778 D 11 16 64

1026220

REVISIONS TDRR 37170				
SYM	DESCRIPTION	CHG NO.	DATE	APPD.

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327.

2. MATERIAL: MYLAR TAPE 1.000 ±.003 WIDE BY 3.5 ±.3 MILS THICK.

QTY	K-START NO. AND REVISION	AGC PROGRAM	TITLE	EFF.
2	F10L004- K10535-00	LUMINARY69	LM FDAI TOT-ATT/ATT-ERR	LM4 & SUBS

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING
MATERIAL SEE NOTE 2
APPROVAL

AC ELECTRONICS DIVISION
GENERAL MOTORS CORP. MILWAUKEE WIS.
DRAWN L. Tanko DATE 18 DEC 68
CHECKED Mozolek 20 DEC 68
APPROVAL D Kossln
CONTRACT NAS 9-497
NASA APPROVAL
APPROVAL

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

K-START TAPE
ASSEMBLY
LM FDAI TOT-ATT/ATT-ERR

SIZE	CODE IDENT NO.	
B	99974	1026220
SCALE —		SHEET 1 OF 1

MIL 10778 D 11 16 64

1026226

REVISIONS TDRR 37435

SYM	DESCRIPTION	CHG NO.	DATE	APPD.

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327.
2. MATERIAL: MYLAR TAPE 1.000 ±.003 WIDE BY 3.5 ±.3 MILS THICK.

QTY	K-START NO. AND REVISION	AGC PROGRAM	TITLE	EFF
2	F11C106-K10527-00	COMANCHE 44 (COLOSSUS II)	GN+C INTERFACE	5/C106

NEXT ASSY	USED ON

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON

FRACTIONS	DECIMALS	ANGLES
+ —	+ —	+ —
— —	— —	— —

DO NOT SCALE THIS DRAWING

MATERIAL SEE NOTE 2

APPROVAL

AC ELECTRONICS DIVISION
GENERAL MOTORS CORP. MILWAUKEE WIS.

DRAWN Ruder DATE 25FEB69
CHECKED C. Kostecka 27FEB69
APPROVAL O Korsl
CONTRACT NAS 9-497
NASA APPROVAL
APPROVAL

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

K-START TAPE
ASSEMBLY
GN+C INTERFACE

SIZE	CODE IDENT NO.	
B	99974	1026226

SCALE —— SHEET 1 OF 1

MIL 10778-D 11-16-64

1026227

REVISIONS TDRR 37435				
SYM	DESCRIPTION	CHG NO.	DATE	APPD

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327.

2. MATERIAL: MYLAR TAPE 1.000 ±.003 WIDE BY 3.5 ±.3 MILS THICK.

QTY	K-START NO. AND REVISION	AGC PROGRAM	TITLE	EFF
2	F11C106-K10528-00	COMANCHE 44 (COLOSSUS II)	I.U. INTERFACE	S/C106

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING
MATERIAL SEE NOTE 2
APPROVAL

AC ELECTRONICS DIVISION
GENERAL MOTORS CORP. MILWAUKEE WIS.
DRAWN Ruder DATE 25 FEB 69
CHECKED C. Krotek 27 FEB 69
APPROVAL O. Korsli
CONTRACT NAS 9-497
NASA APPROVAL
APPROVAL

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

K-START TAPE
ASSEMBLY
I.U. INTERFACE

SIZE B
CODE IDENT NO. 99974
1026227
SCALE ——
SHEET 1 OF 1

MIL 1077B D 11 16 64

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327.
2. MATERIAL: MYLAR TAPE 1.000 ± .003 WIDE BY 3.5 ± .3 MILS THICK.

REVISIONS TDRR 37435

SYM	DESCRIPTION	CHG NO.	DATE	APPD.
A	REVISED PER TDRR 37470		7 APR 69	SA

QTY	K-START NO. AND REVISION	AGC PROGRAM	TITLE	EFF
2	F11C106-K10543-00	COMANCHE 44 (COLOSSUS II)	VHF RANGING TEST	S/C106
2	F11C106-K10543-01	COMANCHE 45 & 51	VHF RANGING TEST	S/C106

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON

FRACTIONS	DECIMALS	ANGLES
+ —	+ —	+ —
— —	— —	— —

DO NOT SCALE THIS DRAWING

MATERIAL
SEE NOTE 2

APPROVAL

AC ELECTRONICS DIVISION
GENERAL MOTORS CORP. MILWAUKEE WIS.

DRAWN	Ruder	DATE 25 FEB 69
CHECKED		27 FEB 69
APPROVAL	O Korslin	
CONTRACT	NAS 9-497	
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MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

K-START TAPE
ASSEMBLY
VHF RANGING TEST

SIZE	CODE IDENT NO.	
B	99974	1026233
SCALE ——		SHEET 1 OF 1

MIL 1077B D 11 16 64

1026233

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327.

2. MATERIAL: MYLAR TAPE 1.000 ±.003 WIDE BY 3.5 ±.3 MILS THICK.

REVISIONS TDRR 37435

SYM	DESCRIPTION	CHG NO.	DATE	APPD.

QTY	K-START NO. AND REVISION	AGC PROGRAM	TITLE	EFF
2	F11C106-K10543-00	COMANCHE 44 (COLOSSUS II)	VHF RANGING TEST	S/C106

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING

MATERIAL
SEE NOTE 2

APPROVAL

AC ELECTRONICS DIVISION
GENERAL MOTORS CORP. MILWAUKEE WIS.

DRAWN Ruder DATE 25 FEB 69
CHECKED 27 FEB 69
APPROVAL O Korslin
CONTRACT NAS 9-497
NASA APPROVAL W J
APPROVAL

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

K-START TAPE
ASSEMBLY
VHF RANGING TEST

SIZE B
CODE IDENT NO. 99974
1026233
SCALE —
SHEET 1 OF 1

MIL 10778-D 11-16-64

1026242

REVISIONS TDRR 37566

SYM	DESCRIPTION	CHG NO.	DATE	APPD.

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327.
2. MATERIAL: MYLAR TAPE 1.000 ±.003 WIDE BY 3.5 ±.3 MILS THICK.

QTY	K-START NO. AND REVISION	AGC PROGRAM	TITLE	EFF
2	F10L005-K10531-00	LUMINARY 97	LM G+N OPERATIONAL	LM-5

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS DECIMALS ANGLES
+ — \+ — \+ —
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DO NOT SCALE THIS DRAWING
MATERIAL
SEE NOTE 2
APPROVAL

AC ELECTRONICS DIVISION
GENERAL MOTORS CORP. MILWAUKEE WIS.
DRAWN Bender 5-MAY-69 DATE
CHECKED Zima 6 MAY 69
APPROVAL O Korshin
CONTRACT NAS 9-497
NASA APPROVAL R. Jacob
APPROVAL

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

K-START TAPE
ASSEMBLY-
LM G+N OPERATIONAL

SIZE B
CODE IDENT NO. 99974
1026242
SCALE —
SHEET 1 OF 1

MIL 10778 D 11-16-64

1026256

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327.

2. MATERIAL: MYLAR TAPE 1.000 ±.003 WIDE BY 3.5 ±.3 MILS THICK.

REVISIONS TDRR 37802

SYM	DESCRIPTION	CHG NO.	DATE	APPD.

QTY	K-START NO. AND REVISION	AGC PROGRAM	TITLE	EFF
2	F11C108-K10527-00	COMANCHE 67	GN&C INTERFACE	S/C108

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON

FRACTIONS	DECIMALS	ANGLES
+ —	+ —	+ —
— —	— —	— —

DO NOT SCALE THIS DRAWING

MATERIAL
SEE NOTE 2

APPROVAL

AC ELECTRONICS DIVISION
GENERAL MOTORS CORP. MILWAUKEE WIS.

DRAWN Wolski DATE 4 SEP 69
CHECKED Moye 5 SEP 69
APPROVAL O Koralin
CONTRACT NAS 9-497

NASA APPROVAL N/A
APPROVAL 9/9/69

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

K-START TAPE
ASSEMBLY -
GN&C INTERFACE

SIZE	CODE IDENT NO.	
B	99974	1026256

SCALE —— SHEET 1 OF 1

MIL 10778-D 11-16-64

REVISIONS TDRR 37803

SYM	DESCRIPTION	CHG NO.	DATE	APPD.

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327.
2. MATERIAL: MYLAR TAPE 1.000 ±.003 WIDE BY 3.5 ±.3 MILS THICK.

QTY	K-START NO. AND REVISION	AGC PROGRAM	TITLE	EFF
2	F10L006-K10517-00	LUMINARY IB	VALVE SIG PROFILE	LM-6

NEXT ASSY	USED ON

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS + — DECIMALS + — ANGLES + —
DO NOT SCALE THIS DRAWING

MATERIAL SEE NOTE 2

APPROVAL

AC ELECTRONICS DIVISION
GENERAL MOTORS CORP. MILWAUKEE WIS.

DRAWN D. Dobbert DATE 4 SEP 69
CHECKED Molye 5 SEP 69
APPROVAL O Korolin
CONTRACT NAS 9-497
NASA APPROVAL N/A
~~MIL~~ APPROVAL 9/9/64

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

K-START TAPE ASSEMBLY-
VALVE SIG PROFILE

SIZE B
CODE IDENT NO. 99974
1026267

SCALE ——
SHEET 1 OF 1

MIL 10778-D 11-16-64

1026279

REVISIONS TDRR 37803

SYM	DESCRIPTION	CHG NO.	DATE	APPD.

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327.
2. MATERIAL: MYLAR TAPE 1.000 ± .003 WIDE BY 3.5 ± .3 MILS THICK.

QTY	K-START NO. AND REVISION	AGC PROGRAM	TITLE	EFF
2	F10L006-K10545-00	LUMINARY1B	ALARMS & INTERRUPTS	LM-6

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS DECIMALS ANGLES
+ — + — + —
DO NOT SCALE THIS DRAWING

MATERIAL
SEE NOTE 2

APPROVAL

AC ELECTRONICS DIVISION
GENERAL MOTORS CORP. MILWAUKEE WIS

DRAWN S. Agne DATE 4 SEP 69
CHECKED Moye 5 SEP 69
APPROVAL C Korelen
CONTRACT NAS 9-497
NASA APPROVAL N/A
APPROVAL 9/9/69

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

K-START TAPE
ASSEMBLY-
ALARMS AND INTERRUPTS

SIZE B
CODE IDENT NO. 99974
1026279
SCALE ——
SHEET 1 OF 1

1026281

REVISIONS TDRR 37907				
SYM	DESCRIPTION		DATE	APPD.
A	REVISED PER TDRR 37920	CHG NO.	21 NOV 69	

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327.
2. MATERIAL: MYLAR TAPE 1.000 ± .003 WIDE BY 3.5 ± .3 MILS THICK.

QTY	K-START NO. AND REVISION	AGC PROGRAM	TITLE	EFF
2	G03L008 - K10548-00	AURORA 88	E-MEMORY RETENTION TEST	LM8
2	G03L008 - K10548-01	AURORA 88	E-MEMORY RETENTION TEST	LM8

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS + — − — DECIMALS + — − — ANGLES + — − —
DO NOT SCALE THIS DRAWING

MATERIAL SEE NOTE 2

APPROVAL

AC ELECTRONICS DIVISION
GENERAL MOTORS CORP. MILWAUKEE WIS

DRAWN P.NOVSHEK DATE 5 NOV 69
CHECKED J.REPINSKI 5NOV69
APPROVAL O. Korslin
CONTRACT NAS 9-497
NASA APPROVAL —
~~MIT~~ CCB APPROVAL 11/5/69

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

K-START TAPE
ASSEMBLY
E-MEMORY RETENTION TEST

SIZE	CODE IDENT NO.	
B	99974	1026281

SCALE —— SHEET 1 OF 1

MIL 10778-D 11-16-64

1026281

REVISIONS TDRR 37907				
SYM	DESCRIPTION	CHG NO.	DATE	APPD.

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327.
2. MATERIAL: MYLAR TAPE 1.000 ± .003 WIDE BY 3.5 ± .3 MILS THICK.

QTY	K-START NO. AND REVISION	AGC PROGRAM	TITLE	EFF
2	G03L008 – K10548-00	AURORA 88	E-MEMORY RETENTION TEST	LM8

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON

FRACTIONS	DECIMALS	ANGLES
+ –	+ –	+ –
– –	– –	– –

DO NOT SCALE THIS DRAWING

MATERIAL SEE NOTE 2

APPROVAL

AC ELECTRONICS DIVISION
GENERAL MOTORS CORP. MILWAUKEE WIS.

DRAWN P. NOVSHEK DATE 5 NOV 69
CHECKED J. REPINSKI 5 NOV 69
APPROVAL O. Korslin
CONTRACT NAS 9-497

NASA APPROVAL —
CCB ~~MIT~~ APPROVAL 11/5/69

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SPACECRAFT CENTER
HOUSTON, TEXAS

K-START TAPE
ASSEMBLY
E-MEMORY RETENTION TEST

SIZE B
CODE IDENT NO. 99974
1026281

SCALE —
SHEET 1 OF 1

MIL 10778-D 11-16-64

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327.
2. MATERIAL: MYLAR TAPE 1.000 ± .003 WIDE BY 3.5 ± .3 MILS THICK.

REVISIONS TDRR 37922

SYM	DESCRIPTION	CHG NO.	DATE	APPD.

QTY	K-START NO. AND REVISION	AGC PROGRAM	TITLE	EFF
2	F11C0720-K10543-00	COMANCHE 72	VHF RANGING TEST	S/C 109

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS DECIMALS ANGLES
+ — + — + —
DO NOT SCALE THIS DRAWING
MATERIAL SEE NOTE 2
APPROVAL

AC ELECTRONICS DIVISION
GENERAL MOTORS CORP. MILWAUKEE WIS.
DRAWN R BOND DATE 18 NOV 69
CHECKED C. PIOJDA 19 NOV 69
APPROVAL O. Korslin
CONTRACT NAS 9-497
NASA APPROVAL N/A
~~MIT~~ APPROVAL

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

K-START TAPE ASSEMBLY — VHF RANGING TEST

SIZE B
CODE IDENT NO. 99974
1026290
SCALE ——
SHEET 1 OF 1

NOTICE - WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REVISIONS TDRR 36371

SYM	ZONE	DESCRIPTION	DR	CHK	DATE	APPROVED
	A	TDRR 36691				

Ⓜ

QTY	K START NO. AND REVISION	PROCESS SPEC. AND / OR OCP*	TITLE	EFF.
2	F08C101 K00067-01		ERASABLE LAUNCH LOAD	G&N 204 S/C 101

MASTER DOCUMENTATION AT MIT/IL STG.

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. MATERIAL: METAL BASE TAPE, $1.000^{\pm 003}$ WIDTH, $3.500^{\pm 003}$ MILS THICK
3. * DENOTES OPERATIONAL CHECKOUT PROCEDURE

QTY REQD	PART OR IDENTIFYING NO.	MATERIAL OR NOTES	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY	USED ON

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
CAPACITOR VALUES ARE IN μf
RESISTOR VALUES ARE IN OHMS
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING

MATERIAL

MIT
INSTRUMENTATION LAB
CAMBRIDGE, MASS.

DRAWN L. J. Barkley 1/19/66
CHECKED
APPROVED
APPROVED
APPROVED MIT
APPROVED MSC
DATE

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

K START TAPE ASSEMBLY

CODE IDENT NO.
SIZE C
DRAWING NO. 1026502
SCALE
SHEET OF

1026502

NOTICE – WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REVISIONS TDRR 36371

SYM	ZONE	DESCRIPTION	DR	CHK	DATE	APPROVED
	A	TDRR 36691				
	B	TDRR 36816			9-12-68	(m) (m)

QTY	K START NO. AND REVISION	PROCESS SPEC. AND / OR OCP*	TITLE	EFF.
2	F08C101 K00067-02		ERASABLE LAUNCH LOAD	G&N 204 S/C 101

MASTER DOCUMENTATION AT MIT/IL STG.

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. MATERIAL: METAL BASE TAPE, 1.000 $\pm$.003 WIDTH, 3.500 $\pm$.003 MILS THICK
3. * DENOTES OPERATIONAL CHECKOUT PROCEDURE

QTY REQD	PART OR IDENTIFYING NO.	MATERIAL OR NOTES	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY	USED ON

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
CAPACITOR VALUES ARE IN µf
RESISTOR VALUES ARE IN OHMS
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING

MATERIAL

MIT
INSTRUMENTATION LAB
CAMBRIDGE, MASS.

DRAWN L. J. Bakely 1/12/66
CHECKED
APPROVED
APPROVED
APPROVED MIT
APPROVED MSC
DATE

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

K START TAPE ASSEMBLY

CODE IDENT NO.
SIZE C
DRAWING NO. 1026502
SCALE
SHEET OF

1026502

NOTICE – WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS, OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REVISIONS TDRR 36371

SYM	ZONE	DESCRIPTION	DR	CHK	DATE	APPROVED
	A	TDRR 36691				ⓜ
	B	TDRR 36816			9-12-68	ⓜ
	C	TDRR 36885				ⓜ

QTY	K START NO. AND REVISION	PROCESS SPEC. AND / OR OCP*	TITLE	EFF.
2	F08C101 K00067-03		ERASABLE LAUNCH LOAD	G&N 204 S/C 101

MASTER DOCUMENTATION AT MIT/IL STG.

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. MATERIAL: METAL BASE TAPE, 1.000 $\pm$.003 WIDTH, 3.500 $\pm$.003 MILS THICK
3. * DENOTES OPERATIONAL CHECKOUT PROCEDURE

QTY REQD	PART OR IDENTIFYING NO.	MATERIAL OR NOTES	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY	USED ON

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
CAPACITOR VALUES ARE IN µf
RESISTOR VALUES ARE IN OHMS
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING

MATERIAL

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DRAWN L. J. Barkley 1/19/66
CHECKED
APPROVED
APPROVED
APPROVED MIT 4Oct68
APPROVED MSC 10/28/68
DATE

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

K START TAPE
ASSEMBLY

CODE IDENT NO.
SIZE C
DRAWING NO. 1026502
SCALE
SHEET OF

1026502

NOTICE — WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REVISIONS TDRR 36371

SYM	ZONE	DESCRIPTION	DR	CHK	DATE	APPROVED
	A	TDRR 36691			12 Aug 68	
	B	TDRR 36816			9-12-68	M
	C	TDRR 36885			4 Oct 68	M
	D	TDRR 36885			4 Oct 68	M

QTY	K START NO. AND REVISION	PROCESS SPEC. AND / OR OCP*	TITLE	EFF.
2	F08C101 K00067-04	—	ERASABLE LAUNCH LOAD	G&N 204 S/C 101

MASTER DOCUMENTATION AT MIT/IL STG.

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. MATERIAL: METAL BASE TAPE, $1.000^{\pm .003}$ WIDTH, $3.500^{\pm .003}$ MILS THICK
3. * DENOTES OPERATIONAL CHECKOUT PROCEDURE

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MATERIAL

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DRAWN L. J. Berkeley 1/19/66
CHECKED
APPROVED
APPROVED
APPROVED MIT 4 Oct 68
APPROVED MSC 10/28/68
DATE

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

K START TAPE
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CODE IDENT NO.
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REVISIONS TDRR 36371

SYM	ZONE	DESCRIPTION	DR	CHK	DATE	APPROVED
	A	TDRR 36691			12 Aug 68	
	B	TDRR 36816			9-12-68	
	C	TDRR 36885			4 Oct 68	Ⓜ
	D	TDRR 36885			4 Oct 68	Ⓜ
	E	TDRR 36885			4 Oct 68	Ⓜ

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QTY	K START NO. AND REVISION	PROCESS SPEC. AND / OR OCP*	TITLE	EFF.
2	F08C101 K00067-05		ERASABLE LAUNCH LOAD	G&N 204 S/C 101

MASTER DOCUMENTATION AT MIT/IL STG.

NOTES:

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DRAWN L. J. Berkeley 1/19/66
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APPROVED MIT 4 Oct 68
APPROVED MSC 10/28/68
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	A	TDRR 36691			12 Aug'68	
	B	TDRR 36816			9-12-68	
	C	TDRR 36885			4 Oct 68	M
	D	TDRR 36885			4 Oct 68	M
	E	TDRR 36885			4 OCT 68	M
	F	TDRR 36885			4 OCT 68	M

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QTY	K START NO. AND REVISION	PROCESS SPEC. AND / OR OCP*	TITLE	EFF.
2	F08C101 K00067-06		ERASABLE LAUNCH LOAD	G&N 204 S/C 101

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NOTES:

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LIST OF MATERIALS

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FRACTIONS DECIMALS ANGLES
± ± ±
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	A	TDRR 36691			12 Aug '68	
	B	TDRR 36816			9-12-68	
	C	TDRR 36885			4 Oct 68	Ⓜ
	D	TDRR 36885			4 Oct 68	Ⓜ
	E	TDRR 36885			4 OCT 68	Ⓜ
	F	TDRR 36885			4 OCT 68	Ⓜ
	G	TDRR 36885			4 OCT '68	Ⓜ

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QTY	K START NO. AND REVISION	PROCESS SPEC. AND / OR OCP*	TITLE	EFF.
2	F08C101 K00067-07		ERASABLE LAUNCH LOAD	GBN 204 S/C 101

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NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. MATERIAL: METAL BASE TAPE, $1.000^{\pm.003}$ WIDTH, $3.500^{\pm.003}$ MILS THICK
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LIST OF MATERIALS

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DRAWN L. J. Berkeley 1/19/66
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APPROVED MSC 10/28/68
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	A	TDRR 36691			12 Aug '68	
	B	TDRR 36816			9-12-68	
	C	TDRR 36885			4 Oct 68	Ⓜ
	D	TDRR 36885			4 Oct 68	Ⓜ
	E	TDRR 36885			4 OCT 68	Ⓜ
	F	TDRR 36885			4 OCT 68	Ⓜ
	G	TDRR 36885			4 OCT '68	Ⓜ
	H	TDRR 36885			4 OCT '68	Ⓜ

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QTY	K START NO. AND REVISION	PROCESS SPEC. AND / OR OCP*	TITLE	EFF.
2	F08C101 K00067-08		ERASABLE LAUNCH LOAD	G&N 204 S/C 101

MASTER DOCUMENTATION AT MIT/IL STG.

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. MATERIAL: METAL BASE TAPE, 1.000 $^{\pm.003}$ WIDTH, 3.500 $^{\pm.003}$ MILS THICK
3. * DENOTES OPERATIONAL CHECKOUT PROCEDURE

QTY REQD	PART OR IDENTIFYING NO.	MATERIAL OR NOTES	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

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DRAWN L. J. Berkeley 1/19/66
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APPROVED MIT 4 Oct 68
APPROVED MSC 10/28/68
DATE

MANNED SPACECRAFT CENTER
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CODE IDENT NO.
SIZE C
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SYM	ZONE	DESCRIPTION	DR	CHK	DATE	APPROVED
	A	TDRR 36691			12 Aug '68	
	B	TDRR 36816			9-12-68	
	C	TDRR 36885			4 Oct 68	M
	D	TDRR 36885			4 Oct 68	M
	E	TDRR 36885			4 OCT 68	M
	F	TDRR 36885			4 OCT 68	M
	G	TDRR 36885			4 OCT '68	M
	H	TDRR 36885			4 OCT '68	M
	I	TDRR 36885			4 OCT '68	M

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QTY	K START NO. AND REVISION	PROCESS SPEC. AND / OR OCP*	TITLE	EFF.
2	F08C101 K00067-09		ERASABLE LAUNCH LOAD	G&N 204 S/C 101

MASTER DOCUMENTATION AT MIT/IL STG.

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. MATERIAL: METAL BASE TAPE, 1.000 ±.003 WIDTH, 3.500 ±.003 MILS THICK
3. * DENOTES OPERATIONAL CHECKOUT PROCEDURE

QTY REQD	PART OR IDENTIFYING NO.	MATERIAL OR NOTES	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

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APPLICATION

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RESISTOR VALUES ARE IN OHMS
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FRACTIONS ± DECIMALS ± ANGLES ±
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MATERIAL

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DRAWN L. J. Berkeley 1/19/66
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APPROVED
APPROVED
APPROVED MIT 4 Oct 68
APPROVED MSC 10/24/68
DATE

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

K START TAPE ASSEMBLY

CODE IDENT NO.
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REVISIONS TDRR 36371

SYM	ZONE	DESCRIPTION	DR	CHK	DATE	APPROVED

QTY	K START NO. AND REVISION	PROCESS SPEC. AND / OR OCP*	TITLE	EFF.
2	F08C101 K00067-00		ERASABLE LAUNCH LOAD	G&N 204 S/C 101

MASTER DOCUMENTATION AT MIT/IL STG.

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. MATERIAL: METAL BASE TAPE, 1.000 $^{\pm.003}$ WIDTH, 3.500 $^{\pm.003}$ MILS THICK
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MATERIAL

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DRAWN L. J. Bakeley 1/18/66
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APPROVED
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APPROVED MIT
APPROVED MSC
DATE

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

K START TAPE ASSEMBLY

CODE IDENT NO.
SIZE C
DRAWING NO. 1026502
SCALE
SHEET OF

1026502

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REVISIONS TDRR 36371

SYM	ZONE	DESCRIPTION	DR	CHK	DATE	APPROVED
	A	TDRR 36691				Ⓜ

QTY	K START NO. AND REVISION	PROCESS SPEC. AND / OR OCP*	TITLE	EFF.
2	F08C101 K00068-01		ERASABLE MISSION LOAD	GBN 204 S/C 101

MASTER DOCUMENTATION AT MIT/IL STG

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. MATERIAL: ~~METAL~~: BASE TAPE, $1.000^{\pm 003}$ WIDTH, $3.500^{\pm 003}$ MILS THICK
3. * DENOTES OPERATIONAL CHECKOUT PROCEDURE

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MATERIAL

MIT
INSTRUMENTATION LAB
CAMBRIDGE, MASS.

DRAWN L. J. Bakley 1/19/66
CHECKED
APPROVED
APPROVED
APPROVED MIT
APPROVED MSC
DATE

MANNED SPACECRAFT CENTER
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K START TAPE ASSEMBLY

CODE IDENT NO.
SIZE C
DRAWING NO. 1026503
SCALE
SHEET OF

1026503

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REVISIONS TDRR 36371

SYM	ZONE	DESCRIPTION	DR	CHK	DATE	APPROVED
	A	TDRR 36691				Ⓜ
	B	TDRR 36847			20Sep68	Ⓜ

QTY	K START NO. AND REVISION	PROCESS SPEC. AND / OR OCP*	TITLE	EFF.
2	F08C101 K00068-02		ERASABLE MISSION LOAD	G&N 204 S/C 101

MASTER DOCUMENTATION AT MIT/IL STG

NOTES:

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1026503

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2	F08C101 K00068-00		ERASABLE MISSION LOAD	GBN 204 S/C 101

MASTER DOCUMENTATION AT MIT/IL STG

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SYM	ZONE	DESCRIPTION	DR	CHK	DATE	APPROVED
	A	TDRR 36691				M

QTY	K START NO. AND REVISION	PROCESS SPEC. AND / OR OCP*	TITLE	EFF.
2	F08C101 K00078-01		SIM FLIGHT	G&N 204 S/C 101

MASTER DOCUMENTATION AT MIT/IL STG

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. MATERIAL: METAL BASE TAPE, 1.000 $^{\pm .003}$ WIDTH, 3.500 $^{\pm .003}$ MILS THICK
3. * DENOTES OPERATIONAL CHECKOUT PROCEDURE

QTY REQD	PART OR IDENTIFYING NO.	MATERIAL OR NOTES	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
CAPACITOR VALUES ARE IN µf
RESISTOR VALUES ARE IN OHMS
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING

MATERIAL

MIT
INSTRUMENTATION LAB
CAMBRIDGE, MASS.

DRAWN L. J. Bakley 4/12/66
CHECKED
APPROVED
APPROVED
APPROVED MIT
APPROVED MSC
DATE

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

K START TAPE ASSEMBLY

CODE IDENT NO
SIZE C
DRAWING NO. 1026504
SCALE
SHEET OF

1026504

NOTICE - WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS, OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REVISIONS TDRR 36371

SYM	ZONE	DESCRIPTION	DR	CHK	DATE	APPROVED
	A	TDRR 36691			9-10-68	M
	B	TDRR 36814				M

QTY	K START NO. AND REVISION	PROCESS SPEC. AND / OR OCP*	TITLE	EFF.
2	F08C101 K00078-02		SIM FLIGHT	G&N 204 S/C 101

MASTER DOCUMENTATION AT MIT/IL STG

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. MATERIAL: METAL BASE TAPE, $1.000^{\pm.003}$ WIDTH, $3.500^{\pm.003}$ MILS THICK
3. * DENOTES OPERATIONAL CHECKOUT PROCEDURE

QTY REQD	PART OR IDENTIFYING NO.	MATERIAL OR NOTES	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY	USED ON

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
CAPACITOR VALUES ARE IN μf
RESISTOR VALUES ARE IN OHMS
TOLERANCES ON
FRACTIONS DECIMALS ANGLES
± ± ±
DO NOT SCALE THIS DRAWING

MATERIAL

MIT
INSTRUMENTATION LAB
CAMBRIDGE, MASS.

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

DRAWN L. J. Babley 1/19/66
CHECKED
APPROVED
APPROVED
APPROVED MIT
APPROVED MSC
DATE

K START TAPE ASSEMBLY

CODE IDENT NO
SIZE C
DRAWING NO. 1026504
SCALE
SHEET OF

1026504

NOTICE – WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REVISIONS TDRR 36137 4/26

SYM	ZONE	DESCRIPTION	DR	CHK	DATE	APPROVED
	A	TDRR 36191				

Ⓜ

QTY	K START NO. AND REVISION	PROCESS SPEC. AND / OR OCP*	TITLE	EFF.
2	F08C101 K00079-01		TVC & RCS DAP POLARITY TEST	G&N 204 S/C 101

MASTER DOCUMENTATION LOCATED AT MIT IL/STG

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. MATERIAL: METALLIZED TAPE, $1.000^{\pm 003}$ WIDTH, $3.500^{\pm 003}$ MILS THICK
3. * DENOTES OPERATIONAL CHECKOUT PROCEDURE

QTY REQD	PART OR IDENTIFYING NO.	MATERIAL OR NOTES	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY	USED ON
2014999	

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
CAPACITOR VALUES ARE IN µf
RESISTOR VALUES ARE IN OHMS
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING

MATERIAL
SEE NOTE 2.

MIT
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DRAWN E. J. Bailey 1/17/66
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APPROVED
APPROVED
APPROVED MIT 4/26/67
APPROVED MSC 4/28/67
DATE

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

K START TAPE ASSEMBLY

CODE IDENT NO.
SIZE C
DRAWING NO. 1026505
SCALE
SHEET OF

1026505

NOTICE - WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS, OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REVISIONS TDRR 36137

SYM	ZONE	DESCRIPTION	DR	CHK	DATE	APPROVED
	A	TDRR 36191				
	B	TDRR 36505				ⓜ
	C	TDRR 36601				ⓜ
						ⓜ

QTY	K START NO. AND REVISION	PROCESS SPEC. AND / OR OCP*	TITLE	EFF.
2	F08C101 K00079-03		TVC & RCS DAP POLARITY TEST	GBN 204 S/C 101

MASTER DOCUMENTATION LOCATED AT MIT IL/STG

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. MATERIAL: ~~METALLIZED~~ TAPE, $1.000^{\pm.003}$ WIDTH, $3.500^{\pm.003}$ MILS THICK
3. * DENOTES OPERATIONAL CHECKOUT PROCEDURE

QTY REQD	PART OR IDENTIFYING NO.	MATERIAL OR NOTES	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY	USED ON
2014995	

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
CAPACITOR VALUES ARE IN μf
RESISTOR VALUES ARE IN OHMS
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING

MATERIAL
SEE NOTE 2.

MIT
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CAMBRIDGE, MASS.

DRAWN L. J. Barkley 1/19/66
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APPROVED
APPROVED MIT
APPROVED MSC 4/19/6
DATE

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

K START TAPE ASSEMBLY

CODE IDENT NO.
SIZE C
DRAWING NO. 1026505
SCALE
SHEET OF

1026505

NOTICE - WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS, OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REVISIONS TDRR 36137 4/26

SYM	ZONE	DESCRIPTION	DR	CHK	DATE	APPROVED

QTY	K START NO. AND REVISION	PROCESS SPEC. AND / OR OCP*	TITLE	EFF.
2	F08C101 K00079-00		TVC & RCS DAP POLARITY TEST	G&N 204 S/C 101

MASTER DOCUMENTATION LOCATED AT MIT IL/STG

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. MATERIAL: METALLIZED TAPE, 1.000 ±.003 WIDTH, 3.500 ±.003 MILS THICK
3. * DENOTES OPERATIONAL CHECKOUT PROCEDURE

QTY REQD	PART OR IDENTIFYING NO.	MATERIAL OR NOTES	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY	USED ON
2014449	

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
CAPACITOR VALUES ARE IN µf
RESISTOR VALUES ARE IN OHMS
TOLERANCES ON
FRACTIONS DECIMALS ANGLES
± ± ±
DO NOT SCALE THIS DRAWING

MATERIAL
SEE NOTE 2.

M!T
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CAMBRIDGE, MASS.

DRAWN L. J. Barkley 1/17/66
CHECKED
APPROVED
APPROVED
APPROVED MIT 4/26/68
APPROVED MSC A. Montgomery 4/29/68
DATE

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

K START TAPE
ASSEMBLY

CODE IDENT NO.
SIZE C
DRAWING NO. 1026505
SCALE
SHEET OF

1026505

NOTICE - WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REVISIONS 36261

SYM	ZONE	DESCRIPTION	DR	CHK	DATE	APPROVED
A		36260			6-20-68	Ⓜ

QTY	K START NO. AND REVISION	PROCESS SPEC. AND / OR OCP*	TITLE	EFF.
2	F07L003 K00067-02		ERASABABLE LAUNCH LOAD	G&N605 LM003

MASTER DOCUMENTATION LOCATED AT MIT/IL STG.

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. MATERIAL: METAL BASE TAPE, $1.000^{\pm .003}$ WIDTH, $3.500^{\pm .003}$ MILS THICK
3. * DENOTES OPERATIONAL CHECKOUT PROCEDURE

QTY REQD	PART OR IDENTIFYING NO.	MATERIAL OR NOTES	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

6010'49	
NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
CAPACITOR VALUES ARE IN μf
RESISTOR VALUES ARE IN OHMS
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING

MATERIAL
SEE NOTE 2

MIT
INSTRUMENTATION LAB
CAMBRIDGE, MASS.

DRAWN L. J. Barkley 1/19/66
CHECKED
APPROVED
APPROVED

APPROVED MIT W C Murley 5-22-68
APPROVED MSC A. Cohen Jr 5/27/68
DATE

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

K START TAPE
ASSEMBLY

CODE IDENT NO.
SIZE C
DRAWING NO 1026507
SCALE
SHEET OF

NOTICE – WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REVISIONS 36261

SYM	ZONE	DESCRIPTION	DR	CHK	DATE	APPROVED
A		36260			6-20-68	M
B		36372			6-21-68	VM

QTY	K START NO. AND REVISION	PROCESS SPEC. AND / OR OCP*	TITLE	EFF.
2	F07L003 K00067-05		ERASABABLE LAUNCH LOAD	G&N605 LM003

MASTER DOCUMENTATION LOCATED AT MIT/IL STG.

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. MATERIAL: METAL BASE TAPE, $1.000^{\pm 003}$ WIDTH, $3.500^{\pm 003}$ MILS THICK
3. * DENOTES OPERATIONAL CHECKOUT PROCEDURE

QTY REQD	PART OR IDENTIFYING NO.	MATERIAL OR NOTES	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY	USED ON
6011499	

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
CAPACITOR VALUES ARE IN µf
RESISTOR VALUES ARE IN OHMS
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING

MATERIAL
SEE NOTE 2

MIT
INSTRUMENTATION LAB
CAMBRIDGE, MASS.

DRAWN L. J. Barkley 4/19/66
CHECKED
APPROVED
APPROVED
APPROVED MIT W. C. Marley 5-27-68
APPROVED MSC 5/27/68
DATE

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

K START TAPE
ASSEMBLY

CODE IDENT NO.
SIZE C
DRAWING NO 1026507
SCALE
SHEET OF

1026507

NOTICE – WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REVISIONS 36261

SYM	ZONE	DESCRIPTION	DR	CHK	DATE	APPROVED
A		36260			6-20-68	(M)
B		36372			6-21-68	(M)
C		36887			10-4-68	(M)
						(M)

QTY	K START NO. AND REVISION	PROCESS SPEC. AND / OR OCP*	TITLE	EFF.
2	F07L003 K00067-03		ERASABABLE LAUNCH LOAD	G&N605 LM003

MASTER DOCUMENTATION LOCATED AT MIT/IL STG.

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. MATERIAL: METAL BASE TAPE, $1.000^{\pm 003}$ WIDTH, $3.500^{\pm 003}$ MILS THICK
3. * DENOTES OPERATIONAL CHECKOUT PROCEDURE

QTY REQD	PART OR IDENTIFYING NO.	MATERIAL OR NOTES	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY	USED ON
6010999	

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
CAPACITOR VALUES ARE IN μf
RESISTOR VALUES ARE IN OHMS
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING

MATERIAL
SEE NOTE 2

MIT
INSTRUMENTATION LAB
CAMBRIDGE, MASS.

DRAWN L. J. Barkley 1/12/66
CHECKED
APPROVED
APPROVED
APPROVED MIT 5.22.68
APPROVED MSC 5/27/68
DATE

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

K START TAPE ASSEMBLY

CODE IDENT NO
SIZE C
DRAWING NO. 1026507
SCALE
SHEET OF

1026507

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REVISIONS 36261

SYM	ZONE	DESCRIPTION	DR	CHK	DATE	APPROVED
A		36260			6-20-68	M
B		36372			6-21-68	M
C		36887			10-4-68	M
D		37222			23 DEC 68	M

QTY	K START NO. AND REVISION	PROCESS SPEC. AND / OR OCP*	TITLE	EFF.
2	F07L003 K00067-[illegible]		ERASABABLE LAUNCH LOAD	G&N605 LM003

MASTER DOCUMENTATION LOCATED AT MIT/IL STG.

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. MATERIAL: METAL BASE TAPE, $1.000^{\pm.003}$ WIDTH, $3.500^{\pm.003}$ MILS THICK
3. * DENOTES OPERATIONAL CHECKOUT PROCEDURE

QTY REQD	PART OR IDENTIFYING NO.	MATERIAL OR NOTES	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY	USED ON
6010499	

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
CAPACITOR VALUES ARE IN μf
RESISTOR VALUES ARE IN OHMS
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING

MATERIAL
SEE NOTE 2

MIT
INSTRUMENTATION LAB
CAMBRIDGE, MASS.

DRAWN L. J. Berkeley 1/19/66
CHECKED
APPROVED
APPROVED
APPROVED MIT MC Murley 5-27-68
APPROVED MSC A Cmk 5/27/68
DATE

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

K START TAPE
ASSEMBLY

CODE IDENT NO.
SIZE C
DRAWING NO. 1026507
SCALE
SHEET OF

1026507

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REVISIONS 36261

SYM	ZONE	DESCRIPTION	DR	CHK	DATE	APPROVED
A		36260			6-20-68	M
B		36372			6-21-68	M
C		36887			10-4-68	M
D		37222			23 DEC 68	M
E		37200			14 JAN 69	M

QTY	K START NO. AND REVISION	PROCESS SPEC. AND / OR OCP*	TITLE	EFF.
2	F07L003 K00067-016		ERASABABLE LAUNCH LOAD	G&N605 LM003

MASTER DOCUMENTATION LOCATED AT MIT/IL STG.

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. MATERIAL: METAL BASE TAPE, 1.000 $^{\pm .003}$ WIDTH, 3.500 $^{\pm .003}$ MILS THICK
3. * DENOTES OPERATIONAL CHECKOUT PROCEDURE

QTY REQD	PART OR IDENTIFYING NO.	MATERIAL OR NOTES	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY	USED ON
6010444	

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
CAPACITOR VALUES ARE IN μf
RESISTOR VALUES ARE IN OHMS
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING

MATERIAL
SEE NOTE 2

MIT
INSTRUMENTATION LAB
CAMBRIDGE, MASS.

DRAWN L. J. Berkeley 1/19/66
CHECKED
APPROVED
APPROVED
APPROVED MIT W G Mushy 5-27-68
APPROVED MSC A Cmith Jr 5/27/68
DATE

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

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ASSEMBLY

CODE IDENT NO.
SIZE C
DRAWING NO. 1026507
SCALE
SHEET OF

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REVISIONS 36261

SYM	ZONE	DESCRIPTION	DR	CHK	DATE	APPROVED
A		36260			6-20-68	Ⓜ
B		36372			6-21-68	Ⓜ
C		36887			10-4-68	Ⓜ
D		37222			23 DEC 68	Ⓜ
E		37200			14 JAN 69	Ⓜ
F		37297			5 FEB 69	Ⓜ
						Ⓜ

QTY	K START NO. AND REVISION	PROCESS SPEC. AND / OR OCP*	TITLE	EFF.
2	F071003 K00067-07		ERASABABLE LAUNCH LOAD	GBN605 LM003

MASTER DOCUMENTATION LOCATED AT MIT/IL STG.

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. MATERIAL: METAL BASE TAPE, 1.000 $^{\pm.003}$ WIDTH, 3.500 $^{\pm.003}$ MILS THICK
3. * DENOTES OPERATIONAL CHECKOUT PROCEDURE

QTY REQD	PART OR IDENTIFYING NO.	MATERIAL OR NOTES	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

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6010444	

APPLICATION

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CAPACITOR VALUES ARE IN µf
RESISTOR VALUES ARE IN OHMS
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING

MATERIAL
SEE NOTE 2

MIT
INSTRUMENTATION LAB
CAMBRIDGE, MASS.

		DATE
DRAWN	L. J. Bakeley	1/19/66
CHECKED		
APPROVED		
APPROVED		
APPROVED MIT	M C Mosley	5-27-68
APPROVED MSC		5/27/68

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HOUSTON, TEXAS

K START TAPE ASSEMBLY

CODE IDENT NO.
SIZE C
DRAWING NO. 1026507
SCALE
SHEET OF

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REVISIONS 36261

SYM	ZONE	DESCRIPTION	DR	CHK	DATE	APPROVED
A		36260			6-20-68	M
B		36372			6-21-68	VM
C		36887			10-4-68	M
D		37222			23 DEC 68	M
E		37200			14 JAN 69	M
F		37297			5 FEB 69	M
G		37330			7 FEB 69	M

QTY	K START NO. AND REVISION	PROCESS SPEC. AND / OR OCP*	TITLE	EFF.
2	F07L003 K00067-08		ERASABABLE LAUNCH LOAD	G&N605 LM003

MASTER DOCUMENTATION LOCATED AT MIT/IL STG.

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. MATERIAL: METAL BASE TAPE, $1.000^{\pm 003}$ WIDTH, $3.500^{\pm 003}$ MILS THICK
3. * DENOTES OPERATIONAL CHECKOUT PROCEDURE

QTY REQD	PART OR IDENTIFYING NO.	MATERIAL OR NOTES	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY	USED ON
6010999	

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
CAPACITOR VALUES ARE IN μf
RESISTOR VALUES ARE IN OHMS
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING

MATERIAL
SEE NOTE 2

MIT
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DRAWN L. J. Berkeley 1/19/66
CHECKED
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APPROVED MIT M C Munley 5-27-68
APPROVED MSC A C Metz Jr 5/27/68
DATE

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

K START TAPE ASSEMBLY

CODE IDENT NO.
SIZE C
DRAWING NO. 1026507
SCALE
SHEET OF

NOTICE – WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REVISIONS 36261

SYM	ZONE	DESCRIPTION	DR	CHK	DATE	APPROVED
A		36260			6-20-68	M
B		36372			6-21-68	M
C		36887			10-4-68	M
D		37222			23 DEC 68	M
E		37200			14 JAN 69	M
F		37297			5 FEB 69	M
G		37330			7 FEB 69	M
H		37330			7 FEB 69	M

QTY	K START NO. AND REVISION	PROCESS SPEC. AND / OR OCP*	TITLE	EFF.
2	F07L003 K00067-09		ERASABABLE LAUNCH LOAD	G&N605 LM003

MASTER DOCUMENTATION LOCATED AT MIT/IL STG.

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. MATERIAL: METAL BASE TAPE, 1.000 $^{\pm .003}$ WIDTH, 3.500 $^{\pm .003}$ MILS THICK
3. * DENOTES OPERATIONAL CHECKOUT PROCEDURE

QTY REQD	PART OR IDENTIFYING NO.	MATERIAL OR NOTES	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY	USED ON
6010444	

APPLICATION

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DRAWN L. J. Berkeley 1/19/66
CHECKED
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APPROVED
APPROVED MIT M G Munley 5-27-68
APPROVED MSC A CMetzger 5/27/68
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SIZE C
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REVISIONS 36261

SYM	ZONE	DESCRIPTION	DR	CHK	DATE	APPROVED
A		36260			6-20-68	M
B		36372			6-21-68	M
C		36887			10-4-68 23 DEC 68	M
D		37222			14 JAN 69	M
E		37200			5 FEB 69	M
F		37297				M
G		37330			7 FEB 69	M
H		37330			7 FEB 69	M
I		37330			7 FEB 69	M

QTY	K START NO. AND REVISION	PROCESS SPEC. AND / OR OCP*	TITLE	EFF.
2	F07L003 K00067-10		ERASABABLE LAUNCH LOAD	G&N605 LM003

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NOTES:

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2. MATERIAL: METAL BASE TAPE, 1.000$^{\pm 003}$ WIDTH, 3.500$^{\pm 003}$ MILS THICK
3. * DENOTES OPERATIONAL CHECKOUT PROCEDURE

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REVISIONS 36261

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A		36260			6-20-68	M
B		36372			6-21-68	M
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J		37330			7 FEB '69	M

QTY	K START NO. AND REVISION	PROCESS SPEC. AND / OR OCP*	TITLE	EFF.
2	F07L003 K00067-1[illegible]		ERASABABLE LAUNCH LOAD	G&N605 LM003

MASTER DOCUMENTATION LOCATED AT MIT/IL STG.

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C		36887			10-4-68	M
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E		37200			14 JAN 69	M
F		37297			5 FEB 69	M
G		37330			7 FEB 69	M
H		37330			7 FEB 69	M
I		37330			7 FEB '69	M
J		37330			7 FEB '69	M
K		37330			7 FEB '69	

QTY	K START NO. AND REVISION	PROCESS SPEC. AND / OR OCP*	TITLE	EFF.
2	F07L003 K00067-12		ERASABABLE LAUNCH LOAD	G&N605 LM003

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NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. MATERIAL: METAL BASE TAPE, $1.000^{\pm.003}$ WIDTH, $3.500^{\pm.003}$ MILS THICK
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DRAWN L. J. Bakaley 1/19/66
CHECKED
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APPROVED MIT W G Marley 5-27-68
APPROVED MSC A Cm 5/27/68
DATE

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REVISIONS 36261

SYM	ZONE	DESCRIPTION	DR	CHK	DATE	APPROVED

QTY	K START NO. AND REVISION	PROCESS SPEC. AND / OR OCP*	TITLE	EFF.
2	F07L003 K00067-00601		ERASABABLE LAUNCH LOAD	G&N605 LM003

MASTER DOCUMENTATION LOCATED AT MIT/IL STG.

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. MATERIAL: METAL BASE TAPE, 1.000 $\pm .003$ WIDTH, 3.500 $\pm .003$ MILS THICK
3. * DENOTES OPERATIONAL CHECKOUT PROCEDURE

QTY REQD	PART OR IDENTIFYING NO.	MATERIAL OR NOTES	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY	USED ON
6012'44	

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
CAPACITOR VALUES ARE IN µf
RESISTOR VALUES ARE IN OHMS
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING

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DRAWN L. J. Bakeley 1/19/66
CHECKED
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APPROVED
APPROVED MIT W6 Munley 5-27-68
APPROVED MSC A. Cohen Jr 5/21/68
DATE

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HOUSTON, TEXAS

K START TAPE
ASSEMBLY

CODE IDENT NO.
SIZE C
DRAWING NO 1026507
SCALE
SHEET OF

NOTICE – WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REVISIONS 36261

SYM	ZONE	DESCRIPTION	DR	CHK	DATE	APPROVED
A		36260			6-20-68	

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QTY	K START NO. AND REVISION	PROCESS SPEC. AND / OR OCP*	TITLE	EFF.
2	F07L003 K00068-02[illegible]		ERASABLE MISSION LOAD	G&N 605 LM003

MASTER DOCUMENTATION LOCATED AT MIT/IL STG.

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. MATERIAL: METAL BASE TAPE, $1.000^{\pm.003}$ WIDTH, $3.500^{\pm.003}$ MILS THICK
3. * DENOTES OPERATIONAL CHECKOUT PROCEDURE

6016444	
NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
CAPACITOR VALUES ARE IN µf
RESISTOR VALUES ARE IN OHMS
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING

MATERIAL
SEE NOTE 2

QTY REQD	PART OR IDENTIFYING NO.	MATERIAL OR NOTES	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

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DRAWN L. J. Berkeley 1/19/66
CHECKED
APPROVED
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APPROVED MIT MG Manley 6-27-68
APPROVED MSC 5/27/9
DATE

K START TAPE ASSEMBLY

CODE IDENT NO.
SIZE C
DRAWING NO. 1026508
SCALE
SHEET OF

1026508

NOTICE – WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REVISIONS 36261

SYM	ZONE	DESCRIPTION	DR	CHK	DATE	APPROVED
A		36260			6-20-68	
B		36372			6-24-68	Ⓜ Ⓜ

QTY	K START NO. AND REVISION	PROCESS SPEC. AND / OR OCP*	TITLE	EFF.
2	F07L003 K00068-03		ERASABLE MISSION LOAD	GBN 605 LM003

MASTER DOCUMENTATION LOCATED AT MIT/IL STG.

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. MATERIAL: METAL BASE TAPE, 1.000 ±.003 WIDTH, 3.500 ±.003 MILS THICK
3. * DENOTES OPERATIONAL CHECKOUT PROCEDURE

QTY REQD	PART OR IDENTIFYING NO.	MATERIAL OR NOTES	NOMENCLATURE OR DESCRIPTION	FIND NO.

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6016444	

APPLICATION

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RESISTOR VALUES ARE IN OHMS
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING

MATERIAL
SEE NOTE 2

MIT
INSTRUMENTATION LAB
CAMBRIDGE, MASS.

DRAWN L. J. Berkeley 1/12/66
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APPROVED
APPROVED
APPROVED MIT M G Marley 5-27-68
APPROVED MSC 5/27/68
DATE

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

K START TAPE
ASSEMBLY

CODE IDENT NO.
SIZE C
DRAWING NO. 1026508
SCALE
SHEET OF

1026508

NOTICE – WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REVISIONS 36261

SYM	ZONE	DESCRIPTION	DR	CHK	DATE	APPROVED
A		36260			6-20-68	
B		36372			6-24-68	M
C		36887			10-4-68	M
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QTY	K START NO. AND REVISION	PROCESS SPEC. AND / OR OCP*	TITLE	EFF.
2	F07L003 K00068-~~03~~		ERASABLE MISSION LOAD	G&N 605 LM003

MASTER DOCUMENTATION LOCATED AT MIT/IL STG.

NOTES:

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DRAWN L. J. Berkeley 1/18/66
CHECKED
APPROVED
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APPROVED MIT 5-29-68
APPROVED MSC 5/27/68
DATE

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HOUSTON, TEXAS

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CODE IDENT NO.
SIZE C
DRAWING NO. 1026508
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A		36260			6-20-68	
B		36372			6-24-68	M
C		36887			10-4-68	M
D		37222			23 Dec 68	M
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QTY	K START NO. AND REVISION	PROCESS SPEC. AND / OR OCP*	TITLE	EFF.
2	F07L003 K00068-05		ERASABLE MISSION LOAD	G&N 605 LM003

MASTER DOCUMENTATION LOCATED AT MIT/IL STG.

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CAMBRIDGE, MASS.

DRAWN L. J. Berkeley 1/19/66
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APPROVED MSC 5/27/68
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QTY	K START NO. AND REVISION	PROCESS SPEC. AND / OR OCP*	TITLE	EFF.
2	F07L003 K00068-06		ERASABLE MISSION LOAD	G&N 605 LM003

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DRAWING NO. 1026508
SCALE
SHEET OF

1026508

NOTICE – WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REVISIONS 36261

SYM	ZONE	DESCRIPTION	DR	CHK	DATE	APPROVED

QTY	K START NO. AND REVISION	PROCESS SPEC. AND / OR OCP*	TITLE	EFF.
2	F07L003 K00068-00[illegible]01		ERASABLE MISSION LOAD	G&N 605 LM003

MASTER DOCUMENTATION LOCATED AT MIT/IL STG.

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. MATERIAL: METAL BASE TAPE, $1.000^{\pm .003}$ WIDTH, $3.500^{\pm .003}$ MILS THICK
3. * DENOTES OPERATIONAL CHECKOUT PROCEDURE

QTY REQD	PART OR IDENTIFYING NO.	MATERIAL OR NOTES	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY	USED ON
6016444	

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
CAPACITOR VALUES ARE IN μf
RESISTOR VALUES ARE IN OHMS
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING

MATERIAL
SEE NOTE 2

MIT
INSTRUMENTATION LAB
CAMBRIDGE, MASS.

DRAWN L. J. Bakeley 1/19/66
CHECKED
APPROVED
APPROVED
APPROVED MIT 5-27-68
APPROVED MSC 5/27/68
DATE

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

K START TAPE
ASSEMBLY

CODE IDENT NO.
SIZE C
DRAWING NO. 1026508
SCALE
SHEET OF

1026508

NOTICE – WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS, OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REVISIONS 3626/

SYM	ZONE	DESCRIPTION	DR	CHK	DATE	APPROVED
A		36260			6-20-68	

Ⓜ

QTY	K START NO. AND REVISION	PROCESS SPEC. AND / OR OCP*	TITLE	EFF.
2	F07L0008 K00078-02		SIM FLIGHT	GBN 605 LM003

MASTER DOCUMENTATION LOCATED AT MIT/IL STG.

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. MATERIAL: METAL BASE TAPE, 1.000 $\pm$.003 WIDTH, 3.500 $\pm$.003 MILS THICK
3. * DENOTES OPERATIONAL CHECKOUT PROCEDURE

QTY REQD	PART OR IDENTIFYING NO.	MATERIAL OR NOTES	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

6014999	
NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
CAPACITOR VALUES ARE IN μf
RESISTOR VALUES ARE IN OHMS
TOLERANCES ON
FRACTIONS DECIMALS ANGLES
± ± ±
DO NOT SCALE THIS DRAWING

MATERIAL
SEE NOTE 2

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HOUSTON, TEXAS

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APPROVED
APPROVED
APPROVED MIT 5-27-68
APPROVED MSC 6/27/68
DATE

K START TAPE ASSEMBLY

CODE IDENT NO.
SIZE C
DRAWING NO. 1026509
SCALE
SHEET OF

1026509

4 3 2 1

NOTICE - WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS, OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REVISIONS 36261

SYM	ZONE	DESCRIPTION	DR	CHK	DATE	APPROVED
A		36260			6-20-68	
B		36372			6-21-68	(M) (M)

QTY	K START NO. AND REVISION	PROCESS SPEC. AND / OR OCP*	TITLE	EFF.
2	F07L0008 K00073-03		SIM FLIGHT	GBN 605 LM003

MASTER DOCUMENTATION LOCATED AT MIT/IL STG.

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. MATERIAL: METAL BASE TAPE, 1.000 $\pm .003$ WIDTH, 3.500 $\pm .003$ MILS THICK
3. * DENOTES OPERATIONAL CHECKOUT PROCEDURE

QTY REQD	PART OR IDENTIFYING NO.	MATERIAL OR NOTES	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY	USED ON
6014999	

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
CAPACITOR VALUES ARE IN µf
RESISTOR VALUES ARE IN OHMS
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING

MATERIAL
SEE NOTE 2

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DRAWN L. J. Barkley 1/12/66
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APPROVED MIT 5-27-68
APPROVED MSC 6/7/68
DATE

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

K START TAPE ASSEMBLY

CODE IDENT NO.
SIZE C
DRAWING NO. 1026509
SCALE
SHEET OF

1026509

4 3 2 1

NOTICE – WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REVISIONS 36261

SYM	ZONE	DESCRIPTION	DR	CHK	DATE	APPROVED
A		36260			6-20-68	
B		36372			6-21-68	Ⓜ
C		36887			10-4-68	Ⓜ
						Ⓜ
						Ⓜ

QTY	K START NO. AND REVISION	PROCESS SPEC. AND / OR OCP*	TITLE	EFF.
2	F07L0003 K00078-03		SIM FLIGHT	GSN 605 LM003

MASTER DOCUMENTATION LOCATED AT MIT/IL STG.

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. MATERIAL: METAL BASE TAPE, 1.000 $^{\pm .003}$ WIDTH, 3.500 $^{\pm .003}$ MILS THICK
3. * DENOTES OPERATIONAL CHECKOUT PROCEDURE

6014999	
NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
CAPACITOR VALUES ARE IN µf
RESISTOR VALUES ARE IN OHMS
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING

MATERIAL
SEE NOTE 2

QTY REQD	PART OR IDENTIFYING NO.	MATERIAL OR NOTES	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

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HOUSTON, TEXAS

DRAWN L. J. Barkley 1/19/66
CHECKED
APPROVED
APPROVED
APPROVED MIT 5-27-68
APPROVED MSC 6/27/68
DATE

K START TAPE ASSEMBLY

CODE IDENT NO.
SIZE C
DRAWING NO. 1026509
SCALE
SHEET OF

NOTICE - WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REVISIONS 36261

SYM	ZONE	DESCRIPTION	DR	CHK	DATE	APPROVED

QTY	K START NO. AND REVISION	PROCESS SPEC. AND / OR OCP*	TITLE	EFF.
2	F07L0003 K00078-00&01		SIM FLIGHT	G&N 605 LM003

MASTER DOCUMENTATION LOCATED AT MIT/IL STG.

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. MATERIAL: METAL BASE TAPE, $1.000^{\pm.003}$ WIDTH, $3.500^{\pm.003}$ MILS THICK
3. * DENOTES OPERATIONAL CHECKOUT PROCEDURE

QTY REQD	PART OR IDENTIFYING NO.	MATERIAL OR NOTES	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY	USED ON
6014999	

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
CAPACITOR VALUES ARE IN µf
RESISTOR VALUES ARE IN OHMS
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING

MATERIAL
SEE NOTE 2

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DRAWN L. J. Bakley 1/19/66
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APPROVED
APPROVED
APPROVED MIT 5-27-68
APPROVED MSC 4/27/68
DATE

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

K START TAPE ASSEMBLY

CODE IDENT NO.
SIZE C
DRAWING NO. 1026509
SCALE
SHEET OF

1026509

NOTICE – WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REVISIONS 36261

SYM	ZONE	DESCRIPTION	DR	CHK	DATE	APPROVED
A		36279			6-20-68	

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QTY	K START NO. AND REVISION	PROCESS SPEC. AND / OR OCP*	TITLE	EFF.
2	F07L003 K00081-02		IMU PERFORMANCE	G&N 605 LM003

MASTER DOCUMENTATION LOCATED AT MIT/IL STG

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. MATERIAL: METAL BASE TAPE, 1.000 $^{\pm.003}$ WIDTH, 3.500 $^{\pm.003}$ MILS THICK
3. * DENOTES OPERATIONAL CHECKOUT PROCEDURE

QTY REQD	PART OR IDENTIFYING NO.	MATERIAL OR NOTES	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY	USED ON
6014444	

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
CAPACITOR VALUES ARE IN µf
RESISTOR VALUES ARE IN OHMS
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING

MATERIAL
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APPROVED		
APPROVED MIT	[illegible]	5-?-68
APPROVED MSC	A [illegible]	5/27/68
		DATE

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

K START TAPE
ASSEMBLY

CODE IDENT NO.	SIZE	DRAWING NO.
	C	1026510

SCALE SHEET OF

1026510

NOTICE – WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REVISIONS 36261

SYM	ZONE	DESCRIPTION	DR	CHK	DATE	APPROVED
A		36279			6-20-68	(M)
B		36600				(M)

QTY	K START NO. AND REVISION	PROCESS SPEC. AND / OR OCP*	TITLE	EFF.
2	F07L003 K00001-05		IMU PERFORMANCE	G&N 605 LM005

MASTER DOCUMENTATION LOCATED AT MIT/IL STG

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. MATERIAL: METAL BASE TAPE, $1.000^{\pm.003}$ WIDTH, $3.500^{\pm.003}$ MILS THICK
3. * DENOTES OPERATIONAL CHECKOUT PROCEDURE

QTY REQD	PART OR IDENTIFYING NO.	MATERIAL OR NOTES	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY	USED ON
6014444	

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
CAPACITOR VALUES ARE IN μf
RESISTOR VALUES ARE IN OHMS
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING

MATERIAL
SEE NOTE 2

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DRAWN L. J. Berkeley 1/19/66
CHECKED
APPROVED
APPROVED
APPROVED MIT 5-23-68
APPROVED MSC 5/27/68
DATE

K START TAPE ASSEMBLY

CODE IDENT NO.
SIZE C
DRAWING NO. 1026510
SCALE
SHEET OF

1026510

NOTICE – WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REVISIONS 36261

SYM	ZONE	DESCRIPTION	DR	CHK	DATE	APPROVED
A		36279			6-20-68	
B		36600				Ⓜ
C		36978				Ⓜ Ⓜ

QTY	K START NO. AND REVISION	PROCESS SPEC. AND / OR OCP*	TITLE	EFF.
2	F07L003 K00061-04		IMU PERFORMANCE	G&N 605 LM003

MASTER DOCUMENTATION LOCATED AT MIT/IL STG

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. MATERIAL: METAL BASE TAPE, $1.000^{\pm.003}$ WIDTH, $3.500^{\pm.003}$ MILS THICK
3. * DENOTES OPERATIONAL CHECKOUT PROCEDURE

QTY REQD	PART OR IDENTIFYING NO.	MATERIAL OR NOTES	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY	USED ON
6014444	

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
CAPACITOR VALUES ARE IN μf
RESISTOR VALUES ARE IN OHMS
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING

MATERIAL
SEE NOTE 2

MIT
INSTRUMENTATION LAB
CAMBRIDGE, MASS.

DRAWN L. J. Bakley 1/19/66
CHECKED
APPROVED
APPROVED
APPROVED MIT 9-27-66
APPROVED MSC A 5/27/66
DATE

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

K START TAPE
ASSEMBLY

CODE IDENT NO.
SIZE C
DRAWING NO. 1026510
SCALE
SHEET OF

NOTICE – WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REVISIONS 36261

SYM	ZONE	DESCRIPTION	DR	CHK	DATE	APPROVED
A		36279			6-20-68	
B		36600			1 Aug 68	(M)
C		36978			4 Nov 68	(jw)
D		36979			4 Nov 68	(M)

QTY	K START NO. AND REVISION	PROCESS SPEC. AND / OR OCP*	TITLE	EFF.
2	F07L003 K00081-05		IMU PERFORMANCE	G&N 605 LM005

MASTER DOCUMENTATION LOCATED AT MIT/IL STG

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. MATERIAL: METAL BASE TAPE, $1.000^{\pm .003}$ WIDTH, $3.500^{\pm .003}$ MILS THICK
3. * DENOTES OPERATIONAL CHECKOUT PROCEDURE

QTY REQD	PART OR IDENTIFYING NO.	MATERIAL OR NOTES	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY	USED ON
6014444	

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
CAPACITOR VALUES ARE IN µf
RESISTOR VALUES ARE IN OHMS
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING

MATERIAL
SEE NOTE 2

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CAMBRIDGE, MASS.

		DATE
DRAWN	L. J. Berkeley	1/19/66
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APPROVED		
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APPROVED MIT	M6 Whitley	5-27-68
APPROVED MSC	A	5/27/68

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

K START TAPE
ASSEMBLY

CODE IDENT NO.
SIZE C
DRAWING NO. 1026510
SCALE
SHEET OF

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REVISIONS 36261

SYM	ZONE	DESCRIPTION	DR	CHK	DATE	APPROVED

QTY	K START NO. AND REVISION	PROCESS SPEC. AND / OR OCP*	TITLE	EFF.
2	F07L003 K00981-01		IMU PERFORMANCE	G&N 605 LM003

MASTER DOCUMENTATION LOCATED AT MIT/IL STG

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. MATERIAL: METAL BASE TAPE, 1.000$^{\pm .003}$ WIDTH, 3.500$^{\pm .003}$ MILS THICK
3. * DENOTES OPERATIONAL CHECKOUT PROCEDURE

QTY REQD	PART OR IDENTIFYING NO.	MATERIAL OR NOTES	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY	USED ON
6014444	

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
CAPACITOR VALUES ARE IN µf
RESISTOR VALUES ARE IN OHMS
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING

MATERIAL
SEE NOTE 2

MIT
INSTRUMENTATION LAB
CAMBRIDGE, MASS.

DRAWN E. J. Berkeley 7/12/66
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APPROVED
APPROVED
APPROVED MIT 5-23-66
APPROVED MSC 5/27/66
DATE

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

K START TAPE ASSEMBLY

CODE IDENT NO.
SIZE C
DRAWING NO. 1026510
SCALE
SHEET OF

1026510

NOTICE - WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REVISIONS 36261

SYM	ZONE	DESCRIPTION	DR	CHK	DATE	APPROVED
	A	TDRR 36372			4-4-68	(M)

QTY	K START NO. AND REVISION	PROCESS SPEC. AND / OR OCP*	TITLE	EFF.
2	F07L003 K00083-01		IRIG SCALE FACTOR	G&N 605 LM003

MASTER DOCUMENTATION LOCATED AT MIT/IL STG.

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. MATERIAL: METAL BASE TAPE, $1.000^{\pm 003}$ WIDTH, $3.500^{\pm 003}$ MILS THICK
3. * DENOTES OPERATIONAL CHECKOUT PROCEDURE

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NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
CAPACITOR VALUES ARE IN µf
RESISTOR VALUES ARE IN OHMS
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING

MATERIAL
SEE NOTE 2

QTY REQD	PART OR IDENTIFYING NO.	MATERIAL OR NOTES	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

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APPROVED MIT 5-28-68
APPROVED MSC 5/27/68
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K START TAPE ASSEMBLY

CODE IDENT NO.
SIZE C
DRAWING NO. 1026512
SCALE
SHEET OF

NOTICE - WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REVISIONS 3626/

SYM	ZONE	DESCRIPTION	DR	CHK	DATE	APPROVED
	A	TDRR 3637✓			4-24/64	Ⓜ
	B	TDRR 36680				Ⓜ

QTY	K START NO. AND REVISION	PROCESS SPEC. AND / OR OCP*	TITLE	EFF.
2	F07L003 K00083-02		IRIG SCALE FACTOR	GBN 605 LM003

MASTER DOCUMENTATION LOCATED AT MIT/IL STG.

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. MATERIAL: METAL BASE TAPE, $1.000^{\pm.003}$ WIDTH, $3.500^{\pm.003}$ MILS THICK
3. * DENOTES OPERATIONAL CHECKOUT PROCEDURE

QTY REQD	PART OR IDENTIFYING NO.	MATERIAL OR NOTES	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY	USED ON
601 ✓	

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
CAPACITOR VALUES ARE IN µf
RESISTOR VALUES ARE IN OHMS
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING

MATERIAL
SEE NOTE 2

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APPROVED MIT 5-28-64
APPROVED MSC 5/4/64
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MANNED SPACECRAFT CENTER
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K START TAPE ASSEMBLY

CODE IDENT NO.
SIZE C
DRAWING NO 1026512
SCALE
SHEET OF

1026512

NOTICE - WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REVISIONS 36261

SYM	ZONE	DESCRIPTION	DR	CHK	DATE	APPROVED

QTY	K START NO. AND REVISION	PROCESS SPEC. AND / OR OCP*	TITLE	EFF.
2	F07L003 K00083-00		IRIG SCALE FACTOR	G&N 605 LM 003

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NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. MATERIAL: METAL BASE TAPE, $1.000^{\pm.003}$ WIDTH, $3.500^{\pm.003}$ MILS THICK
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601	

APPLICATION

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K START TAPE ASSEMBLY

CODE IDENT NO.
SIZE C
DRAWING NO. 1026512
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REVISIONS 36261

SYM	ZONE	DESCRIPTION	DR	CHK	DATE	APPROVED

QTY	K START NO. AND REVISION	PROCESS SPEC. AND / OR OCP*	TITLE	EFF.
2	F07L003 K00084-00		AGS ALIGN	G&N605 LM003

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NOTES:

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2. MATERIAL: METAL BASE TAPE, 1.000 ±.003 WIDTH, 3.500 ±.003 MILS THICK
3. * DENOTES OPERATIONAL CHECKOUT PROCEDURE

QTY REQD	PART OR IDENTIFYING NO.	MATERIAL OR NOTES	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY	USED ON
6014995	

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APPROVED MIT 5-27-68
APPROVED MSC 5/27/68
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K START TAPE ASSEMBLY

CODE IDENT NO.
SIZE C
DRAWING NO. 1026513
SCALE
SHEET OF

NOTICE – WHEN GOVERNMENT DRAWINGS SPECIFICATIONS OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER: AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED FURNISHED OR IN ANY WAY SUPPLIED THE SAID DRAWINGS SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REVISIONS 36261

SYM	ZONE	DESCRIPTION	DR	CHK	DATE	APPROVED

QTY	K START NO. AND REVISION	PROCESS SPEC. AND / OR OCP*	TITLE	EFF.
2	F07L003 K00085-00		RCS / TVC DAP POLARITY	G&N 605 LM 003

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NOTES:

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APPROVED MSC 5/27/68
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CODE IDENT NO.
SIZE C
DRAWING NO 1026514
SCALE
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1026514

NOTICE – WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REVISIONS TDRR 36880

SYM	ZONE	DESCRIPTION	DR	CHK	DATE	APPROVED
-	A	TDRR 36919				Ⓜ

QTY	K START NO. AND REVISION	PROCESS SPEC. AND / OR OCP*	TITLE	EFF.
-2	F09C103 ~~K00067~~-01		LAUNCH LOAD	G&N 208 S/C 103

MASTER DOCUMENTATION LOCATED AT MIT/STG.

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. MATERIAL: METAL BASE TAPE, $1.000^{\pm 003}$ WIDTH, $3.500^{\pm 003}$ MILS THICK
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LIST OF MATEPIALS

NEXT ASSY	USED ON
2014999	

APPLICATION

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APPROVED MSC 10/1/68
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CODE IDENT NO.
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DRAWING NO. 1026516
SCALE
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REVISIONS TDRR 36880

SYM	ZONE	DESCRIPTION	DR	CHK	DATE	APPROVED
-	A	TDRR 36919			21 Oct 68	
	B	36994			6 Nov 68	Ⓜ

QTY	K START NO. AND REVISION	PROCESS SPEC. AND / OR OCP*	TITLE	EFF.
-2	F09C103 ~~K00067-02~~		LAUNCH LOAD	G&N 208 S/C 103

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NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. MATERIAL: METAL BASE TAPE, $1.000^{\pm .003}$ WIDTH, $3.500^{\pm .003}$ MILS THICK
3. * DENOTES OPERATIONAL CHECKOUT PROCEDURE

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APPROVED MIT	M6 Mauley	10-1-68
APPROVED MSC		10/1/68

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CODE IDENT NO.
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REVISIONS TDRR 36880

SYM	ZONE	DESCRIPTION	DR	CHK	DATE	APPROVED
-	A	TDRR 36919			21Oct68	
	B	36994			6Nov68	M
	C	37064			27Nov68	M

QTY	K START NO. AND REVISION	PROCESS SPEC. AND / OR OCP*	TITLE	EFF.
2	F09C103 ~~K00067~~-03		LAUNCH LOAD	G&N 208 S/C 103

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NOTES:

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LIST OF MATEPIALS

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		DATE
DRAWN	L. J. Berkeley	1/19/66
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APPROVED MIT	M6 Mucky	10-1-68
APPROVED MSC		10/1/68

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K START TAPE ASSEMBLY

CODE IDENT NO.	SIZE	DRAWING NO.
	C	1026516

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REVISIONS TDRR 36880

SYM	ZONE	DESCRIPTION	DR	CHK	DATE	APPROVED
-	A	TDRR 36919			21Oct68	
	B	36994			6 Nov 68	M
	C	37064			27Nov68	M
	D	37122			13 DEC 68	M

QTY	K START NO. AND REVISION	PROCESS SPEC. AND / OR OCP*	TITLE	EFF.
-2	F09C103 ~~K00067-04~~		LAUNCH LOAD	G&N 208 S/C 103

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NOTES:

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APPROVED MSC 10/1/68
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REVISIONS TDRR 36880

SYM	ZONE	DESCRIPTION	DR	CHK	DATE	APPROVED
-	A	TDRR 36919			21Oct68	M
	B	36994			6 Nov 68	M
	C	37064			27Nov68	M
	D	37122			13 DEC 68	M
	E	37125			16 DEC 68	M

QTY	K START NO. AND REVISION	PROCESS SPEC. AND / OR OCP*	TITLE	EFF.
2	F09C103 ~~K00067-05~~		LAUNCH LOAD	G&N 208 S/C 103

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NOTES:

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REVISIONS TDRR 36880

SYM	ZONE	DESCRIPTION	DR	CHK	DATE	APPROVED
-	A	TDRR 36919			21Oct68	
	B	36994			6 Nov 68	M
	C	37064			27 Nov 68	M
	D	37122			13 DEC 68	M
	E	37125			16 DEC 68	M
	F	37125			16 DEC 68	M

QTY	K START NO. AND REVISION	PROCESS SPEC. AND / OR OCP*	TITLE	EFF.
2	F09C103 K00067-06		LAUNCH LOAD	G&N 208 S/C 103

MASTER DOCUMENTATION LOCATED AT MIT/STG.

NOTES:

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–	A	TDRR 36919			21Oct68	
	B	36994			6 Nov 68	M
	C	37064			27 Nov 68	M
	D	37122			13 DEC 68	M
	E	37125			16 DEC 68	M
	F	37125			16 DEC 68	M
	G	37125			16 DEC 68	M

QTY	K START NO. AND REVISION	PROCESS SPEC. AND / OR OCP*	TITLE	EFF.
2	F09C103 K00067-07		LAUNCH LOAD	G&N 208 S/C 103

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NOTES:

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REVISIONS TDRR 36880

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		B	36994			6 Nov 68	Ⓜ
		C	37064			27 Nov 68	Ⓜ
		D	37122			13 DEC 68	Ⓜ
		E	37125			16 DEC 68	Ⓜ
		F	37125			16 DEC 68	Ⓜ
Ⓜ		G	37125			16 DEC 68	Ⓜ
		H	37125			16 DEC 68	

QTY	K START NO. AND REVISION	PROCESS SPEC. AND / OR OCP*	TITLE	EFF.
2	F09C103 K00067-08		LAUNCH LOAD	G&N 208 S/C 103

MASTER DOCUMENTATION LOCATED AT MIT/STG.

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. MATERIAL: METAL BASE TAPE, $1.000^{\pm .003}$ WIDTH, $3.500^{\pm .003}$ MILS THICK
3. * DENOTES OPERATIONAL CHECKOUT PROCEDURE

QTY REQD	PART OR IDENTIFYING NO.	MATERIAL OR NOTES	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATEPIALS

NEXT ASSY	USED ON
2014999	

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
CAPACITOR VALUES ARE IN µf
RESISTOR VALUES ARE IN OHMS
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
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APPROVED MIT M6 Mealy 10-1-68
APPROVED MSC A. Ch[illegible] Jr 10/1/68
DATE

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K START TAPE ASSEMBLY

CODE IDENT NO.
SIZE C
DRAWING NO. 1026516
SCALE
SHEET OF

NOTICE – WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REVISIONS TDRR 36880

SYM	ZONE	DESCRIPTION	DR	CHK	DATE	APPROVED
Ⓜ -	A	TDRR 36919			21Oct68	
	B	36994			6 Nov 68	Ⓜ
	C	37064			27 Nov 68	Ⓜ
	D	37122			13 DEC 68	Ⓜ
	E	37125			16 DEC 68	Ⓜ
	F	37125			16 DEC 68	Ⓜ
Ⓜ	G	37125			16 DEC 68	Ⓜ
	H	37125			16 DEC 68	Ⓜ
	J	37125			16 DEC 68	

QTY	K START NO. AND REVISION	PROCESS SPEC. AND / OR OCP✱	TITLE	EFF.
2	F09C103 K00067-09		LAUNCH LOAD	G&N 208 S/C 103

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NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. MATERIAL: METAL BASE TAPE, $1.000^{\pm 003}$ WIDTH, $3.500^{\pm 003}$ MILS THICK
3. ✱ DENOTES OPERATIONAL CHECKOUT PROCEDURE

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		DATE
DRAWN	L. J. Berkeley	1/19/66
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APPROVED MIT	M6 Mauly	10-1-68
APPROVED MSC		10/1/68

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REVISIONS TDRR 36880

SYM	ZONE	DESCRIPTION	DR	CHK	DATE	APPROVED
-	A	TDRR 36919				

QTY	K START NO. AND REVISION	PROCESS SPEC. AND / OR OCP*	TITLE	EFF.
2	F09C103 K00068-01		MISSION LOAD	G&N 208 S/E 183

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NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. MATERIAL: METAL BASE TAPE, $1.000^{\pm .003}$ WIDTH, $3.500^{\pm .003}$ MILS THICK
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DRAWN	L. J. Bakeley	1/19/66
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APPROVED MIT	M. B. Mealy	10-1-68
APPROVED MSC		10/1/68
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CODE IDENT NO.	SIZE	DRAWING NO.
	C	1026517

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REVISIONS TDRR 36880

SYM	ZONE	DESCRIPTION	DR	CHK	DATE	APPROVED
-	A	TDRR 36919			21 Oct 68	
	B	36994			6 Nov 68	M

QTY	K START NO. AND REVISION	PROCESS SPEC. AND / OR OCP*	TITLE	EFF.
2	F09C103 K00068-02		MISSION LOAD	G&N 208 S/G [illegible]

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NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
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-	A	TDRR 36919			21Oct68	
	B	36994			6Nov68	M
	C	37064			27Nov68	M

QTY	K START NO. AND REVISION	PROCESS SPEC. AND / OR OCP*	TITLE	EFF.
2	F09C103 K00068-03		MISSION LOAD -	G&N 208 S/C 103

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NOTES:

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APPROVED MSC 10/1/68
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REVISIONS TDRR37233

SYM	ZONE	DESCRIPTION	DR	CHK	DATE	APPROVED
	A	TDRR37443				M

QTY	K START NO. AND REVISION	PROCESS SPEC. AND / OR OCP*	TITLE	EFF.
2	F10L004 K00067-01		ERASABLE LAUNCH LOAD	GRN606 LM004

MASTER DOCUMENTATION LOCATED AT MIT/STG.

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. MATERIAL: METAL BASE TAPE, 1.000 ±.003 WIDTH, 3.500 ±.003 MILS THICK
3. * DENOTES OPERATIONAL CHECKOUT PROCEDURE

QTY REQD	PART OR IDENTIFYING NO.	MATERIAL OR NOTES	NOMENCLATURE OR DESCRIPTION	FIND NO.

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SCALE
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REVISIONS TDRR37233

SYM	ZONE	DESCRIPTION	DR	CHK	DATE	APPROVED
(A)	A	TDRR37443				(M)
	B	TDRR37442				

QTY	K START NO. AND REVISION	PROCESS SPEC. AND / OR OCP*	TITLE	EFF.
2	F10L004 K00067-02		ERASABLE LAUNCH LOAD	G&N606 LM004

MASTER DOCUMENTATION LOCATED AT MIT/STG.

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. MATERIAL: METAL BASE TAPE, $1.000^{\pm .003}$ WIDTH, $3.500^{\pm .003}$ MILS THICK
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APPROVED MSC
DATE

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REVISIONS TDRR 37233

SYM	ZONE	DESCRIPTION	DR	CHK	DATE	APPROVED

QTY	K START NO. AND REVISION	PROCESS SPEC. AND / OR OCP*	TITLE	EFF.
2	F10L004 K00067-08		ERASABLE LAUNCH LOAD	G&N 606 LM004

MASTER DOCUMENTATION LOCATED AT MIT/STG.

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. MATERIAL: METAL BASE TAPE, $1.000^{\pm .003}$ WIDTH, $3.500^{\pm .003}$ MILS THICK
3. * DENOTES OPERATIONAL CHECKOUT PROCEDURE

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REVISIONS TDRR 37233

SYM	ZONE	DESCRIPTION	DR	CHK	DATE	APPROVED
	A	TDRR 27443				Ⓜ

QTY	K START NO. AND REVISION	PROCESS SPEC. AND / OR OCP*	TITLE	EFF.
2	F10L004K00068-01		ERASABLE LAUNCH LOAD	G&N606 LM004

MASTER DOCUMENTATION LOCATED AT MIT/STG.

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. MATERIAL: METAL BASE TAPE, $1.000^{\pm.003}$ WIDTH, $3.500^{\pm.003}$ MILS THICK
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REVISIONS TDRR 37233

SYM	ZONE	DESCRIPTION	DR	CHK	DATE	APPROVED
Ⓜ	A	TDRR 37443				
	B	TDRR 37442				Ⓜ

QTY	K START NO. AND REVISION	PROCESS SPEC. AND / OR OCP*	TITLE	EFF.
2	F10L004K00068-02		ERASABLE LAUNCH LOAD	G&N606 LM004

MASTER DOCUMENTATION LOCATED AT MIT/STG.

1026522

NOTES:

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2	F10L004K00068-00		ERASABLE LAUNCH LOAD	G&N606 LM004

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2	F10L004K00078-00		SIMFLIGHT	G&N 606 LM004

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CODE IDENT NO.
SIZE C
DRAWING NO. 1026524
SCALE
SHEET OF

NOTICE — WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REVISIONS TDRR 37197

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SYM	ZONE	DESCRIPTION	DR	CHK	DATE	APPROVED
	A	FDRR 37443				

QTY	K START NO. AND REVISION	PROCESS SPEC. AND / OR OCP*	TITLE	EFF.
2	FIOLOO4KOOO81-01		IMU PERFORMANCE TEST	G&N 606 LM004

MASTER DOCUMENTATION LOCATED AT MIT/STG.

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. MATERIAL: METAL BASE TAPE, $1.000^{\pm .003}$ WIDTH, $3.500^{\pm .003}$ MILS THICK
3. * DENOTES OPERATIONAL CHECKOUT PROCEDURE

QTY REQD	PART OR IDENTIFYING NO.	MATERIAL OR NOTES	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATEPIALS

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
CAPACITOR VALUES ARE IN μf
RESISTOR VALUES ARE IN OHMS
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING

MATERIAL
SEE NOTE 2.

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DRAWN L. J. Barkley 1/19/66
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APPROVED MIT MG Hurley 13 Jan '69
APPROVED MSC A. C 1/13/65
DATE

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

K START TAPE ASSEMBLY

CODE IDENT NO.
SIZE C
DRAWING NO. 1026525
SCALE
SHEET OF

NOTICE – WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REVISIONS TDRR 37197

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SYM	ZONE	DESCRIPTION	DR	CHK	DATE	APPROVED
	A	FDRR 37443				
	B	TDRR 37484				

QTY	K START NO. AND REVISION	PROCESS SPEC. AND / OR OCP*	TITLE	EFF.
2	F10L004K00081-02		IMU PERFORMANCE TEST	G&N 606 LM 004 G+N 609 LM 005

MASTER DOCUMENTATION LOCATED AT MIT/STG.

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. MATERIAL: METAL BASE TAPE, $1.000^{\pm.003}$ WIDTH, $3.500^{\pm.003}$ MILS THICK
3. * DENOTES OPERATIONAL CHECKOUT PROCEDURE

QTY REQD	PART OR IDENTIFYING NO.	MATERIAL OR NOTES	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY	USED ON

APPLICATION

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TOLERANCES ON
FRACTIONS DECIMALS ANGLES
± ± ±
DO NOT SCALE THIS DRAWING

MATERIAL
SEE NOTE 2.

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DRAWN L. J. Berkeley 1/19/66
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APPROVED
APPROVED

APPROVED MIT M G Murley 13 Jan '69
APPROVED MSC 1/13/69
DATE

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

K START TAPE ASSEMBLY

CODE IDENT NO.
SIZE C
DRAWING NO. 1026525
SCALE
SHEET OF

NOTICE — WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REVISIONS TDRR 37197

SYM	ZONE	DESCRIPTION	DR	CHK	DATE	APPROVED

QTY	K START NO. AND REVISION	PROCESS SPEC. AND / OR OCP*	TITLE	EFF.
2	F10L004K00081-00		IMU PERFORMANCE TEST	G&N 606 LM004

MASTER DOCUMENTATION LOCATED AT MIT/STG.

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. MATERIAL: METAL BASE TAPE, 1.000 $\pm .003$ WIDTH, 3.500 $\pm .003$ MILS THICK
3. * DENOTES OPERATIONAL CHECKOUT PROCEDURE

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SEE NOTE 2.

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APPROVED
APPROVED
APPROVED MIT M G Murley 13 Jan '69
APPROVED MSC 1/13/65
DATE

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

K START TAPE ASSEMBLY

CODE IDENT NO.
SIZE C
DRAWING NO. 1026525
SCALE
SHEET OF

1026525

NOTICE – WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

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REVISIONS TDRR 37197

SYM	ZONE	DESCRIPTION	DR	CHK	DATE	APPROVED
	A	TDRR 37198			13 JAN 69	

QTY	K START NO. AND REVISION	PROCESS SPEC. AND / OR OCP*	TITLE	EFF.
2	FIOL004 K00082-01		AGS INITIALIZATION (EARTH ORBIT)	G&N606 LM004

MASTER DOCUMENTATION LOCATED AT MIT/STG.

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. MATERIAL: METAL BASE TAPE, 1.000 $^{\pm.003}$ WIDTH, 3.500 $^{\pm.003}$ MILS THICK
3. * DENOTES OPERATIONAL CHECKOUT PROCEDURE

QTY REQD	PART OR IDENTIFYING NO.	MATERIAL OR NOTES	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY	USED ON
APPLICATION	

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FRACTIONS ± DECIMALS ± ANGLES ±
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APPROVED MIT		13 Jan '69
APPROVED MSC		1/17/68
		DATE

MANNED SPACECRAFT CENTER
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K START TAPE ASSEMBLY

CODE IDENT NO.
SIZE C
DRAWING NO. 1026526
SCALE
SHEET OF

1026526

NOTICE – WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REVISIONS TDRR 37197

SYM	ZONE	DESCRIPTION	DR	CHK	DATE	APPROVED

QTY	K START NO. AND REVISION	PROCESS SPEC. AND / OR OCP*	TITLE	EFF.
2	FIOL004 K00083-00		IRIG SCALE FACTOR TEST	G&N 606 LM004

MASTER DOCUMENTATION LOCATED AT MIT/STG.

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. MATERIAL: METAL BASE TAPE, $1.000^{\pm 003}$ WIDTH, $3.500^{\pm 003}$ MILS THICK
3. * DENOTES OPERATIONAL CHECKOUT PROCEDURE

QTY REQD	PART OR IDENTIFYING NO.	MATERIAL OR NOTES	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY	USED ON
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RESISTOR VALUES ARE IN OHMS
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
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MATERIAL
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APPROVED MIT 13JAN67
APPROVED MSC 1/13/67
DATE

MANNED SPACECRAFT CENTER
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K START TAPE ASSEMBLY

CODE IDENT NO.	SIZE	DRAWING NO.
	C	1026527
SCALE		SHEET OF

1026527

NOTICE – WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REVISIONS TDRR 37037

SYM	ZONE	DESCRIPTION	DR	CHK	DATE	APPROVED

QTY	K START NO. AND REVISION	PROCESS SPEC. AND / OR OCP*	TITLE	EFF.
2	F08C101 K00089-00		G&N PIPA BUBBLE TEST	G&N204 S/C 101

MASTER DOCUMENTATION LOCATED AT MIT/STG.

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. MATERIAL: METAL BASE TAPE, $1.000^{\pm.003}$ WIDTH, $3.500^{\pm.003}$ MILS THICK
3. * DENOTES OPERATIONAL CHECKOUT PROCEDURE

QTY REQD	PART OR IDENTIFYING NO.	MATERIAL OR NOTES	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

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RESISTOR VALUES ARE IN OHMS
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING

MATERIAL
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APPROVED
APPROVED MIT M. B. Mudey 20 Nov 68
APPROVED MSC 11/20
DATE

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K START TAPE ASSEMBLY

CODE IDENT NO.
SIZE C
DRAWING NO. 1026530
SCALE
SHEET OF

1026530

NOTICE – WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REVISIONS TDRR 37046

SYM	ZONE	DESCRIPTION	DR	CHK	DATE	APPROVED

QTY	K START NO. AND REVISION	PROCESS SPEC. AND / OR OCP*	TITLE	EFF.
2	F09C104 K00081-00		IMU PERFORMANCE TEST	GSN 209 S/C 104

MASTER DOCUMENTATION LOCATED AT MIT/STG.

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. MATERIAL: METAL BASE TAPE, $1.000^{\pm.003}$ WIDTH, $3.500^{\pm.003}$ MILS THICK
3. * DENOTES OPERATIONAL CHECKOUT PROCEDURE

QTY REQD	PART OR IDENTIFYING NO.	MATERIAL OR NOTES	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
CAPACITOR VALUES ARE IN µf
RESISTOR VALUES ARE IN OHMS
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING

MATERIAL
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APPROVED MIT M. Mosley 20Nov68
APPROVED MSC 11/20
DATE

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K START TAPE ASSEMBLY

CODE IDENT NO.
SIZE C
DRAWING NO. 1026534
SCALE
SHEET OF

1026534

NOTICE – WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REVISIONS TDRR 37046

SYM	ZONE	DESCRIPTION	DR	CHK	DATE	APPROVED

QTY	K START NO. AND REVISION	PROCESS SPEC. AND / OR OCP*	TITLE	EFF.
2	F09C104 K00083-00		IRIG SCALE FACTOR TEST	G&N 209 S/C 104

MASTER DOCUMENTATION LOCATED AT MIT/STG.

NOTES:
1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. MATERIAL: METAL BASE TAPE, 1.000 $\pm .003$ WIDTH, 3.500 $\pm .003$ MILS THICK
3. * DENOTES OPERATIONAL CHECKOUT PROCEDURE

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
CAPACITOR VALUES ARE IN μf
RESISTOR VALUES ARE IN OHMS
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING

MATERIAL
SEE NOTE 2.

QTY REQD	PART OR IDENTIFYING NO.	MATERIAL OR NOTES	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATEPIALS

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HOUSTON, TEXAS

		DATE
DRAWN	L. J. Berkeley	1/19/66
CHECKED		
APPROVED		
APPROVED		
APPROVED MIT	M. W. Manley	20 Nov '68
APPROVED MSC		11/20

K START TAPE ASSEMBLY

CODE IDENT NO.	SIZE	DRAWING NO.
	C	1026535
SCALE		SHEET OF

1026535

NOTICE – WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REVISIONS TDRR 37074

SYM	ZONE	DESCRIPTION	DR	CHK	DATE	APPROVED
	A	TDRR 37199			14 JAN '69	

(M)

QTY	K START NO. AND REVISION	PROCESS SPEC. AND / OR OCP*	TITLE	EFF.
2	F09C104 K00067-01		ERASABLE LAUNCH LOAD	G&N 209 S/C 104

MASTER DOCUMENTATION LOCATED AT MIT/STG.

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. MATERIAL: METAL BASE TAPE, 1.000 $^{\pm .003}$ WIDTH, 3.500 $^{\pm .003}$ MILS THICK
3. * DENOTES OPERATIONAL CHECKOUT PROCEDURE

1026536

QTY REQD	PART OR IDENTIFYING NO.	MATERIAL OR NOTES	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
CAPACITOR VALUES ARE IN µf
RESISTOR VALUES ARE IN OHMS
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING

MATERIAL
SEE NOTE 2.

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DRAWN L. J. Barkley 1/19/66
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APPROVED
APPROVED
APPROVED MIT 2 Dec '68
APPROVED MSC 12/2/
DATE

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

K START TAPE
ASSEMBLY

CODE IDENT NO.
SIZE C
DRAWING NO. 1026536
SCALE
SHEET OF

NOTICE – WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REVISIONS TDRR 37074

SYM	ZONE	DESCRIPTION	DR	CHK	DATE	APPROVED
	A	TDRR 37199			14 JAN '69	
	B	37298			5 FEB '69	

QTY	K START NO. AND REVISION	PROCESS SPEC. AND / OR OCP*	TITLE	EFF.
2	F09C104 K00067-02		ERASABLE LAUNCH LOAD	G&N 209 S/C 104

MASTER DOCUMENTATION LOCATED AT MIT/STG.

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. MATERIAL: METAL BASE TAPE, 1.000 $^{\pm .003}$ WIDTH, 3.500 $^{\pm .003}$ MILS THICK
3. * DENOTES OPERATIONAL CHECKOUT PROCEDURE

QTY REQD	PART OR IDENTIFYING NO.	MATERIAL OR NOTES	NOMENCLATURE OR DESCRIPTION	FIND NO.

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DO NOT SCALE THIS DRAWING

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DRAWN L. J. Berkeley 1/19/66
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APPROVED
APPROVED MIT W. H. Munley 2 Dec '68
APPROVED MSC 12/2/68
DATE

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

K START TAPE ASSEMBLY

CODE IDENT NO.
SIZE C
DRAWING NO. 1026536
SCALE
SHEET OF

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REVISIONS TDRR 37074

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SYM	ZONE	DESCRIPTION	DR	CHK	DATE	APPROVED
	A	TDRR 37199			14 JAN '69	
	B	37298			5 FEB '69	Ⓜ
	C	37331			7 Feb 69	Ⓜ

QTY	K START NO. AND REVISION	PROCESS SPEC. AND / OR OCP*	TITLE	EFF.
2	F09C104 K00067-03		ERASABLE LAUNCH LOAD	G&N 209 S/C 104

MASTER DOCUMENTATION LOCATED AT MIT/STG.

1026536

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. MATERIAL: METAL BASE TAPE, 1.000 ±.003 WIDTH, 3.500 ±.003 MILS THICK
3. * DENOTES OPERATIONAL CHECKOUT PROCEDURE

QTY REQD	PART OR IDENTIFYING NO.	MATERIAL OR NOTES	NOMENCLATURE OR DESCRIPTION	FIND NO.

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APPROVED MSC 12/2/68
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CODE IDENT NO.
SIZE C
DRAWING NO. 1026536
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REVISIONS TDRR 37074

SYM	ZONE	DESCRIPTION	DR	CHK	DATE	APPROVED
Ⓜ	A	TDRR 37199			14JAN69	
	B	37298			5FEB69	Ⓜ
Ⓜ	C	37331			7Feb69	
	D	37331			7FEB69	Ⓜ

QTY	K START NO. AND REVISION	PROCESS SPEC. AND / OR OCP*	TITLE	EFF.
2	F09C104K00067-04		ERASABLE LAUNCH LOAD	G&N 209 S/C 104

MASTER DOCUMENTATION LOCATED AT MIT/STG.

NOTES:
1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. MATERIAL: METAL BASE TAPE, $1.000^{\pm.003}$ WIDTH, $3.500^{\pm.003}$ MILS THICK
3. * DENOTES OPERATIONAL CHECKOUT PROCEDURE

QTY REQD	PART OR IDENTIFYING NO.	MATERIAL OR NOTES	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY	USED ON

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
CAPACITOR VALUES ARE IN µf
RESISTOR VALUES ARE IN OHMS
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
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MATERIAL
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CODE IDENT NO.	SIZE	DRAWING NO.
	C	1026536

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SYM	ZONE	DESCRIPTION	DR	CHK	DATE	APPROVED
	A	TDRR 37199			14 JAN '69	
	B	37298			5 FEB '69	M
	C	37331			7 Feb 69	M
	D	37331			7 FEB '69	M
	E	37331			7 FEB '69	M

QTY	K START NO. AND REVISION	PROCESS SPEC. AND / OR OCP*	TITLE	EFF.
2	F09C104 K00067-06		ERASABLE LAUNCH LOAD	G&N 209 S/C 104

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NOTES:

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	F	37331			7 FEB '69	M
	G	37331			7 FEB '69	

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	H	37331			7 FEB '69	

QTY	K START NO. AND REVISION	PROCESS SPEC. AND / OR OCP*	TITLE	EFF.
2	F09C104 K00067-08		ERASABLE LAUNCH LOAD	G&N 209 S/C 104

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	J	37331			7 FEB '69	

QTY	K START NO. AND REVISION	PROCESS SPEC. AND / OR OCP*	TITLE	EFF.
2	F09C104K00067-09		ERASABLE LAUNCH LOAD	G&N 209 S/C 104

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	K	37331			7 FEB '69	

QTY	K START NO. AND REVISION	PROCESS SPEC. AND / OR OCP*	TITLE	EFF.
2	F09C104 K00067-10		ERASABLE LAUNCH LOAD	G&N 209 S/C 104

MASTER DOCUMENTATION LOCATED AT MIT/STG.

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2	F09C104 K00067-14		ERASABLE LAUNCH LOAD	G&N 209 S/C 104

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QTY	K START NO. AND REVISION	PROCESS SPEC. AND / OR OCP*	TITLE	EFF.
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SYM	ZONE	DESCRIPTION	DR	CHK	DATE	APPROVED
Ⓜ	A	TDRR 37199			14 JAN '69	
	B	37298			5 FEB '69	Ⓜ
Ⓜ	C	37331			7 Feb 69	Ⓜ
	D	37331			7 FEB '69	Ⓜ
	E	37331			7 FEB '69	Ⓜ
	F	37331			7 FEB '69	Ⓜ
	G	37331			7 FEB '69	
	H	37331			7 FEB '69	
	J	37331			7 FEB '69	
	K	37331			7 FEB '69	
	L	37331			7 FEB '69	
	M	37331			7 FEB '69	
	N	37331			7 FEB '69	
	O	37331			7 FEB '69	

QTY	K START NO. AND REVISION	PROCESS SPEC. AND / OR OCP*	TITLE	EFF.
2	F09C104K00067-14		ERASABLE LAUNCH LOAD	G&N 209 S/C 104

MASTER DOCUMENTATION LOCATED AT MIT/STG.

1026536

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. MATERIAL: METAL BASE TAPE, $1.000^{\pm.003}$ WIDTH, $3.500^{\pm.003}$ MILS THICK
3. * DENOTES OPERATIONAL CHECKOUT PROCEDURE

QTY REQD	PART OR IDENTIFYING NO.	MATERIAL OR NOTES	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY	USED ON

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
CAPACITOR VALUES ARE IN µf
RESISTOR VALUES ARE IN OHMS
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING

MATERIAL
SEE NOTE 2.

MIT
INSTRUMENTATION LAB
CAMBRIDGE, MASS.

		DATE
DRAWN	L. J. Berkeley	1/19/66
CHECKED		
APPROVED		
APPROVED		
APPROVED MIT	W M Murley	2 Dec '68
APPROVED MSC		12/3/68

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

K START TAPE ASSEMBLY

CODE IDENT NO.	SIZE	DRAWING NO.
	C	1026536

SCALE

SHEET OF

NOTICE – WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USES FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REVISIONS TDRR 37074

SYM	ZONE	DESCRIPTION	DR	CHK	DATE	APPROVED

QTY	K START NO. AND REVISION	PROCESS SPEC. AND / OR OCP*	TITLE	EFF.
2	F09C104 K00067-00		ERASABLE LAUNCH LOAD	G&N 209 S/C 104

MASTER DOCUMENTATION LOCATED AT MIT/STG.

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. MATERIAL: METAL BASE TAPE, 1.000$^{\pm.003}$ WIDTH, 3.500$^{\pm.003}$ MILS THICK
3. * DENOTES OPERATIONAL CHECKOUT PROCEDURE

QTY REQD	PART OR IDENTIFYING NO.	MATERIAL OR NOTES	NOMENCLATURE OR DESCRIPTION	FIND NO.

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MATERIAL
SEE NOTE 2.

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DRAWN L. J. Berkeley 1/19/66
CHECKED
APPROVED
APPROVED
APPROVED MIT W. Mueller 2Dec'68
APPROVED MSC 12/2/6
DATE

MANNED SPACECRAFT CENTER
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K START TAPE ASSEMBLY

CODE IDENT NO.
SIZE C
DRAWING NO. 1026536
SCALE
SHEET OF

1026536

NOTICE – WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REVISIONS TDRR 37074

SYM	ZONE	DESCRIPTION	DR	CHK	DATE	APPROVED
	A	TDRR 37199			14JAN69	

(MW)

QTY	K START NO. AND REVISION	PROCESS SPEC. AND / OR OCP*	TITLE	EFF.
2	F09C104K00068-01		ERASABLE MISSION LOAD	G&N 209 S/C 104

MASTER DOCUMENTATION LOCATED AT MIT/STG.

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. MATERIAL: METAL BASE TAPE, 1.000 $\pm .003$ WIDTH, 3.500 $\pm .003$ MILS THICK
3. * DENOTES OPERATIONAL CHECKOUT PROCEDURE

QTY REQD	PART OR IDENTIFYING NO.	MATERIAL OR NOTES	NOMENCLATURE OR DESCRIPTION	FIND NO.

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HOUSTON, TEXAS

		DATE
DRAWN	L. J. Berkeley	1/19/66
CHECKED		
APPROVED		
APPROVED		
APPROVED MIT	M G Munley	2Dec'68
APPROVED MSC		12/2/68

K START TAPE ASSEMBLY

CODE IDENT NO.
SIZE C
DRAWING NO. 1026537
SCALE
SHEET OF

1026537

NOTICE – WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REVISIONS TDRR 37074

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QTY	K START NO. AND REVISION	PROCESS SPEC. AND / OR OCP*	TITLE	EFF.
2	F09C104K00068-00		ERASABLE MISSION LOAD	G&N 209 S/C 104

MASTER DOCUMENTATION LOCATED AT MIT/STG.

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. MATERIAL: METAL BASE TAPE, 1.000 $^{\pm .003}$ WIDTH, 3.500 $^{\pm .003}$ MILS THICK
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DRAWN L. J. Berkeley 1/19/66
CHECKED
APPROVED
APPROVED
APPROVED MIT 2 Dec 68
APPROVED MSC 12/2/68
DATE

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

K START TAPE ASSEMBLY

CODE IDENT NO.
SIZE C
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REVISIONS TDRR 37074

SYM	ZONE	DESCRIPTION	DR	CHK	DATE	APPROVED

QTY	K START NO. AND REVISION	PROCESS SPEC. AND / OR OCP*	TITLE	EFF.
2	F09C104K00078-00		SIMFLIGHT , C	GBN 209 S/C 104

MASTER DOCUMENTATION LOCATED AT MIT/STG.

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. MATERIAL: METAL BASE TAPE, 1.000 $^{\pm.003}$ WIDTH, 3.500 $^{\pm.003}$ MILS THICK
3. * DENOTES OPERATIONAL CHECKOUT PROCEDURE

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DRAWN L. J. Bakley 1/19/66
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APPROVED
APPROVED MIT M L Murley 2 Dec 68
APPROVED MSC 12/2/68
DATE

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K START TAPE ASSEMBLY

CODE IDENT NO.
SIZE C
DRAWING NO. 1026538
SCALE
SHEET OF

1026538

NOTICE – WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REVISIONS 37437

SYM	ZONE	DESCRIPTION	DR	CHK	DATE	APPROVED

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QTY	K START NO. AND REVISION	PROCESS SPEC. AND / OR OCP*	TITLE	EFF.
2	F10L005K00085-00		RCS/TVC DAP POLARITY	G&N BUG LM5

MASTER DOCUMENTATION LOCATED AT MIT/STG.

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. MATERIAL: METAL BASE TAPE, 1.000 $\pm.003$ WIDTH, 3.500 $\pm.003$ MILS THICK
3. * DENOTES OPERATIONAL CHECKOUT PROCEDURE

QTY REQD	PART OR IDENTIFYING NO.	MATERIAL OR NOTES	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATEPIALS

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FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING

MATERIAL
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DRAWN L. J. Berkeley 1/19/66
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APPROVED
APPROVED
APPROVED MIT MG Manley 21 Mar '69
APPROVED MSC 4/1/69
DATE

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

K START TAPE ASSEMBLY

CODE IDENT NO.
SIZE C
DRAWING NO. 1026542
SCALE
SHEET OF

NOTICE – WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REVISIONS TDRR 37637

SYM	ZONE	DESCRIPTION	DR	CHK	DATE	APPROVED
	A	TDRR 37589			5/12/69	Ⓜ

QTY	K START NO. AND REVISION	PROCESS SPEC. AND / OR OCP*	TITLE	EFF.
2	F10L005-K00067-01		LAUNCH LOAD	GBN609 LM5

MASTER DOCUMENTATION LOCATED AT MIT/STG.

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. MATERIAL: METAL BASE TAPE, 1.000 $\pm .003$ WIDTH, 3.500 $\pm .003$ MILS THICK
3. * DENOTES OPERATIONAL CHECKOUT PROCEDURE

QTY REQD	PART OR IDENTIFYING NO.	MATERIAL OR NOTES	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY	USED ON

APPLICATION

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CAPACITOR VALUES ARE IN µf
RESISTOR VALUES ARE IN OHMS
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING

MATERIAL
SEE NOTE 2.

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DRAWN L. J. Berkeley 1/19/66
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APPROVED
APPROVED
APPROVED MIT McKinley 21 Mar 69
APPROVED MSC 3/21/69
DATE

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

K START TAPE
ASSEMBLY

CODE IDENT NO.
SIZE C
DRAWING NO. 1026555
SCALE
SHEET OF

1026555

NOTICE – WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REVISIONS TDRR 37437

SYM	ZONE	DESCRIPTION	DR	CHK	DATE	APPROVED

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QTY	K START NO. AND REVISION	PROCESS SPEC. AND / OR OCP*	TITLE	EFF.
2	F10L005-K00067-00		LAUNCH LOAD	G&N609 LM5

C

B

MASTER DOCUMENTATION LOCATED AT MIT/STG.

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. MATERIAL: METAL BASE TAPE, 1.000 $^{\pm .003}$ WIDTH, 3.500 $^{\pm .003}$ MILS THICK
3. * DENOTES OPERATIONAL CHECKOUT PROCEDURE

A

QTY REQD	PART OR IDENTIFYING NO.	MATERIAL OR NOTES	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY	USED ON

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
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TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING

MATERIAL
SEE NOTE 2.

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DRAWN L. J. Berkeley 1/19/66
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APPROVED MIT M. G. Kinsley 21 Mar 69
APPROVED MSC 3/21/69
DATE

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

K START TAPE
ASSEMBLY

CODE IDENT NO.
SIZE C
DRAWING NO. 1026555
SCALE
SHEET OF

NOTICE – WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REVISIONS TDRR 37437

SYM	ZONE	DESCRIPTION	DR	CHK	DATE	APPROVED
	A	TDRR 37589			5/12/69	

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QTY	K START NO. AND REVISION	PROCESS SPEC. AND / OR OCP*	TITLE	EFF.
2	F10L005 K00068-01		MISSION LOAD	G&N-609 LM 5

MASTER DOCUMENTATION LOCATED AT MIT/STG.

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. MATERIAL: METAL BASE TAPE, 1.000 $^{\pm.003}$ WIDTH, 3.500 $^{\pm.003}$ MILS THICK
3. * DENOTES OPERATIONAL CHECKOUT PROCEDURE

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DRAWN	L. J. Berkeley	1/19/66
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APPROVED		
APPROVED MIT		21 Mar 69
APPROVED MSC		3/21/69
		DATE

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

K START TAPE ASSEMBLY

CODE IDENT NO.	SIZE	DRAWING NO.
	C	1026556
SCALE		SHEET OF

1026556

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REVISIONS TDRR 37437

SYM	ZONE	DESCRIPTION	DR	CHK	DATE	APPROVED

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QTY	K START NO. AND REVISION	PROCESS SPEC. AND / OR OCP*	TITLE	EFF.
2	F10L005K00068-00		MISSION LOAD	G&N 609 LM 5

MASTER DOCUMENTATION LOCATED AT MIT/STG.

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. MATERIAL: METAL BASE TAPE, $1.000^{\pm.003}$ WIDTH, $3.500^{\pm.003}$ MILS THICK
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DRAWN L. J. Berkeley 1/19/66
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APPROVED
APPROVED
APPROVED MIT 21 Mar 67
APPROVED MSC 3/21/67
DATE

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

K START TAPE
ASSEMBLY

CODE IDENT NO.
SIZE C
DRAWING NO. 1026556
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REVISIONS TDRR 37437

SYM	ZONE	DESCRIPTION	DR	CHK	DATE	APPROVED
	A	37575			7MAY'69	

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QTY	K START NO. AND REVISION	PROCESS SPEC. AND / OR OCP*	TITLE	EFF.
2	F10L005 K00078-01		SIMFLIGHT	G&N609 LM5

MASTER DOCUMENTATION LOCATED AT MIT/STG.

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
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DRAWN L. J. Barkley 1/19/66.
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APPROVED MIT M6 Hanley 21 Mar 69
APPROVED MSC 3/21/69
DATE

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K START TAPE
ASSEMBLY

CODE IDENT NO.
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DRAWING NO. 1026557
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1026557

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REVISIONS 1 DRR 37437

SYM	ZONE	DESCRIPTION	DR	CHK	DATE	APPROVED

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QTY	K START NO. AND REVISION	PROCESS SPEC. AND / OR OCP*	TITLE	EFF.
2	FA0L065 K00078		SIMFLIGHT	G&N609 LM5

MASTER DOCUMENTATION LOCATED AT MIT/STG.

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
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SEE NOTE 2.

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DRAWN	L. J. Bakeley	1/19/66
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APPROVED MIT		21 Mar 69
APPROVED MSC		3/21/6
		DATE

K START TAPE ASSEMBLY

CODE IDENT NO.

SIZE C

DRAWING NO. 1026557

SCALE

SHEET OF

NOTICE – WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REVISIONS TDRR 37562

SYM	ZONE	DESCRIPTION	DR	CHK	DATE	APPROVED

QTY	K START NO. AND REVISION	PROCESS SPEC. AND / OR OCP*	TITLE	EFF.
2	FIOL005K00084-00		IMU/ASA MECHANICAL ALIGNMENT	G&N 609 LM005

MASTER DOCUMENTATION LOCATED AT MIT/STG.

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. MATERIAL: METAL BASE TAPE, 1.000 $\pm .003$ WIDTH, 3.500 $\pm .003$ MILS THICK
3. * DENOTES OPERATIONAL CHECKOUT PROCEDURE

QTY REQD	PART OR IDENTIFYING NO.	MATERIAL OR NOTES	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY	USED ON

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
CAPACITOR VALUES ARE IN μf
RESISTOR VALUES ARE IN OHMS
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING

MATERIAL
SEE NOTE 2.

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DRAWN	L. J. Berkeley	1/19/66
CHECKED		
APPROVED		
APPROVED		
APPROVED MIT		
APPROVED MSC		
		DATE

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HOUSTON, TEXAS

K START TAPE ASSEMBLY

CODE IDENT NO.	SIZE	DRAWING NO.
	C	1026558

SCALE

SHEET OF

NOTICE – WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REVISIONS TDRR 37441

SYM	ZONE	DESCRIPTION	DR	CHK	DATE	APPROVED

QTY	K START NO. AND REVISION	PROCESS SPEC. AND / OR OCP*	TITLE	EFF.
2	F11C106K00067-00		LAUNCH LOAD	G&N 206 S/C106

1026559

MASTER DOCUMENTATION LOCATED AT MIT/STG.

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. MATERIAL: METAL BASE TAPE, $1.000^{\pm.003}$ WIDTH, $3.500^{\pm.003}$ MILS THICK
3. ✱ DENOTES OPERATIONAL CHECKOUT PROCEDURE

QTY REQD	PART OR IDENTIFYING NO.	MATERIAL OR NOTES	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATEPIALS

NEXT ASSY	USED ON

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
CAPACITOR VALUES ARE IN μf
RESISTOR VALUES ARE IN OHMS
TOLERANCES ON
FRACTIONS DECIMALS ANGLES
± ± ±
DO NOT SCALE THIS DRAWING

MATERIAL
SEE NOTE 2.

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APPROVED MIT McMurty 26 Mar 69
APPROVED MSC 3/21/69
DATE

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HOUSTON, TEXAS

K START TAPE
ASSEMBLY

CODE IDENT NO.
SIZE C
DRAWING NO. 1026559
SCALE
SHEET OF

NOTICE – WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REVISIONS TDRR 37441

SYM	ZONE	DESCRIPTION	DR	CHK	DATE	APPROVED
	A	TDRR 37474			3 APR 69	

QTY	K START NO. AND REVISION	PROCESS SPEC. AND / OR OCP*	TITLE	EFF.
2	F11C106K000-68-01		MISSION LOAD	G&N 206 S/C 106

MASTER DOCUMENTATION LOCATED AT MIT/STG.

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. MATERIAL: METAL BASE TAPE, 1.000 $\pm.003$ WIDTH, 3.500 $\pm.003$ MILS THICK
3. * DENOTES OPERATIONAL CHECKOUT PROCEDURE

QTY REQD	PART OR IDENTIFYING NO.	MATERIAL OR NOTES	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATEPIALS

NEXT ASSY	USED ON

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
CAPACITOR VALUES ARE IN µf
RESISTOR VALUES ARE IN OHMS
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING

MATERIAL
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APPROVED MSC 3/26/69
DATE

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K START TAPE ASSEMBLY

CODE IDENT NO.
SIZE C
DRAWING NO. 1026560
SCALE
SHEET OF

NOTICE – WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REVISIONS TDRR 37441

SYM	ZONE	DESCRIPTION	DR	CHK	DATE	APPROVED

QTY	K START NO. AND REVISION	PROCESS SPEC. AND / OR OCP*	TITLE	EFF.
2	F11C106K000-68-00		MISSION LOAD	G&N 206 S/C 106

MASTER DOCUMENTATION LOCATED AT MIT/STG.

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. MATERIAL: METAL BASE TAPE, 1.000 ±.003 WIDTH, 3.500 ±.003 MILS THICK
3. * DENOTES OPERATIONAL CHECKOUT PROCEDURE

QTY REQD	PART OR IDENTIFYING NO.	MATERIAL OR NOTES	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATEPIALS

NEXT ASSY	USED ON

APPLICATION

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DIMENSIONS ARE IN INCHES
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TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING

MATERIAL
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APPROVED MSC 3/24/69
DATE

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K START TAPE
ASSEMBLY

CODE IDENT NO.
SIZE C
DRAWING NO. 1026560
SCALE
SHEET OF

1026560

NOTICE – WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REVISIONS TDRR 37590

SYM	ZONE	DESCRIPTION	DR	CHK	DATE	APPROVED

QTY	K START NO. AND REVISION	PROCESS SPEC. AND / OR OCP*	TITLE	EFF.
2	F11C107K00081-00		IMU PERFORMANCE TEST	G&N 210 S/C 107

MASTER DOCUMENTATION LOCATED AT MIT/STG.

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. MATERIAL: METAL BASE TAPE, $1.000^{\pm.003}$ WIDTH, $3.500^{\pm.003}$ MILS THICK
3. * DENOTES OPERATIONAL CHECKOUT PROCEDURE

QTY REQD	PART OR IDENTIFYING NO.	MATERIAL OR NOTES	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATEPIALS

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
CAPACITOR VALUES ARE IN µf
RESISTOR VALUES ARE IN OHMS
TOLERANCES ON
FRACTIONS DECIMALS ANGLES
± ± ±
DO NOT SCALE THIS DRAWING

MATERIAL
SEE NOTE 2.

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APPROVED MIT
APPROVED MSC 5/12/5
DATE

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K START TAPE ASSEMBLY

CODE IDENT NO.
SIZE C
DRAWING NO. 1026567
SCALE
SHEET OF

NOTICE — WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REVISIONS TDRR 37561

SYM	ZONE	DESCRIPTION	DR	CHK	DATE	APPROVED

QTY	K START NO. AND REVISION	PROCESS SPEC. AND / OR OCP*	TITLE	EFF.
2	F11C107K00083-00		IRIG SCALE FACTOR TEST	G&N 210 S/C 107

MASTER DOCUMENTATION LOCATED AT MIT/STG.

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. MATERIAL: METAL BASE TAPE, $1.000^{\pm.003}$ WIDTH, $3.500^{\pm.003}$ MILS THICK
3. * DENOTES OPERATIONAL CHECKOUT PROCEDURE

QTY REQD	PART OR IDENTIFYING NO.	MATERIAL OR NOTES	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATEPIALS

NEXT ASSY	USED ON

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
CAPACITOR VALUES ARE IN µf
RESISTOR VALUES ARE IN OHMS
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING

MATERIAL
SEE NOTE 2.

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APPROVED MIT
APPROVED MSC 5/5/67
DATE

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K START TAPE ASSEMBLY

CODE IDENT NO.
SIZE C
DRAWING NO. 1026568
SCALE
SHEET OF

1026568

NOTICE – WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REVISIONS TDRR 37062

SYM	ZONE	DESCRIPTION	DR	CHK	DATE	APPROVED

QTY	K START NO. AND REVISION	PROCESS SPEC. AND / OR OCP*	TITLE	EFF.
2	F10L005K00083-00		IRIG SCALE FACTOR TEST	G&N 609 LM 005.

MASTER DOCUMENTATION LOCATED AT MIT/STG.

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. MATERIAL: METAL BASE TAPE, $1.000^{\pm.003}$ WIDTH, $3.500^{\pm.003}$ MILS THICK
3. * DENOTES OPERATIONAL CHECKOUT PROCEDURE

QTY REQD	PART OR IDENTIFYING NO.	MATERIAL OR NOTES	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATEPIALS

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
CAPACITOR VALUES ARE IN µf
RESISTOR VALUES ARE IN OHMS
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING

MATERIAL
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APPROVED MIT
APPROVED MSC 5/5/67
DATE

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K START TAPE ASSEMBLY

CODE IDENT NO.
SIZE C
DRAWING NO. 1026570
SCALE
SHEET OF

1026570

NOTICE – WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REVISIONS TDRR 37608

SYM	ZONE	DESCRIPTION	DR	CHK	DATE	APPROVED

QTY	K START NO. AND REVISION	PROCESS SPEC. AND / OR OCP*	TITLE	EFF.
2	F11C107K00067-00		LAUNCH LOAD	G&N210 S/C107

MASTER DOCUMENTATION LOCATED AT MIT/STG.

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. MATERIAL: METAL BASE TAPE, 1.000 $^{\pm.003}$ WIDTH, 3.500 $^{\pm.003}$ MILS THICK
3. * DENOTES OPERATIONAL CHECKOUT PROCEDURE

QTY REQD	PART OR IDENTIFYING NO.	MATERIAL OR NOTES	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATEPIALS

NEXT ASSY	USED ON

APPLICATION

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DIMENSIONS ARE IN INCHES
CAPACITOR VALUES ARE IN μf
RESISTOR VALUES ARE IN OHMS
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING

MATERIAL
SEE NOTE 2.

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APPROVED MSC A. C. 5/13/6
DATE

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HOUSTON, TEXAS

K START TAPE ASSEMBLY

CODE IDENT NO.
SIZE C
DRAWING NO. 1026576
SCALE
SHEET OF

1026576

NOTICE – WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REVISIONS TDRR 37608

SYM	ZONE	DESCRIPTION	DR	CHK	DATE	APPROVED

QTY	K START NO. AND REVISION	PROCESS SPEC. AND / OR OCP*	TITLE	EFF.
2	F11C107K00068-00		MISSION LOAD	G&N 210 S/C 107

MASTER DOCUMENTATION LOCATED AT MIT/STG.

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. MATERIAL: METAL BASE TAPE, 1.000 ±.003 WIDTH, 3.500 ±.003 MILS THICK
3. * DENOTES OPERATIONAL CHECKOUT PROCEDURE

QTY REQD	PART OR IDENTIFYING NO.	MATERIAL OR NOTES	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATEPIALS

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
CAPACITOR VALUES ARE IN μf
RESISTOR VALUES ARE IN OHMS
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING

MATERIAL
SEE NOTE 2.

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APPROVED MIT 5/27/69
APPROVED MSC 5/13/6
DATE

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K START TAPE
ASSEMBLY

CODE IDENT NO.
SIZE C
DRAWING NO. 1026577
SCALE
SHEET OF

1026577

NOTICE – WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REVISIONS TDRR 37676

SYM	ZONE	DESCRIPTION	DR	CHK	DATE	APPROVED

QTY	K START NO. AND REVISION	PROCESS SPEC. AND / OR OCP*	TITLE	EFF.
2	F10L006K0085-00		RCS TVC DAP POLARITY TEST	G&N 607 LM 006

MASTER DOCUMENTATION LOCATED AT MIT/STG.

1026581

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. MATERIAL: METAL BASE TAPE, $1.000^{\pm 003}$ WIDTH, $3.500^{\pm 003}$ MILS THICK
3. * DENOTES OPERATIONAL CHECKOUT PROCEDURE

QTY REQD	PART OR IDENTIFYING NO.	MATERIAL OR NOTES	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATEPIALS

NEXT ASSY	USED ON

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
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RESISTOR VALUES ARE IN OHMS
TOLERANCES ON
FRACTIONS DECIMALS ANGLES
± ± ±
DO NOT SCALE THIS DRAWING

MATERIAL
SEE NOTE 2.

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DRAWN L. J. Berkeley 1/19/66
CHECKED
APPROVED
APPROVED
APPROVED MIT
APPROVED MSC 2/3/67
DATE

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

K START TAPE ASSEMBLY

CODE IDENT NO.
SIZE C
DRAWING NO. 1026581
SCALE
SHEET OF

NOTICE – WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REVISIONS TDRR 37681

SYM	ZONE	DESCRIPTION	DR	CHK	DATE	APPROVED

QTY	K START NO. AND REVISION	PROCESS SPEC. AND / OR OCP*	TITLE	EFF.
2	F 10 L006 K000 78-00		SIMFLIGHT	G&N 607 LM006

MASTER DOCUMENTATION LOCATED AT MIT/STG.

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. MATERIAL: METAL BASE TAPE, $1.000^{\pm.003}$ WIDTH, $3.500^{\pm.003}$ MILS THICK
3. * DENOTES OPERATIONAL CHECKOUT PROCEDURE

QTY REQD	PART OR IDENTIFYING NO.	MATERIAL OR NOTES	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATEPIALS

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TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING

MATERIAL
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APPROVED MIT 7/1/69
APPROVED MSC
DATE

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HOUSTON, TEXAS

K START TAPE ASSEMBLY

CODE IDENT NO.
SIZE C
DRAWING NO. 1026582
SCALE
SHEET OF

1026582

NOTICE – WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REVISIONS TDRR 37798

SYM	ZONE	DESCRIPTION	DR	CHK	DATE	APPROVED

QTY	K START NO. AND REVISION	PROCESS SPEC. AND / OR OCP*	TITLE	EFF.
2	F11C108K00081-00		IMU PERFORMANCE	G&N 211 S/C108

MASTER DOCUMENTATION LOCATED AT MIT/STG.

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. MATERIAL: METAL BASE TAPE, 1.000 $\pm.003$ WIDTH, 3.500 $\pm.003$ MILS THICK
3. * DENOTES OPERATIONAL CHECKOUT PROCEDURE

QTY REQD	PART OR IDENTIFYING NO.	MATERIAL OR NOTES	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATEPIALS

NEXT ASSY	USED ON

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TOLERANCES ON
FRACTIONS DECIMALS ANGLES
± ± ±
DO NOT SCALE THIS DRAWING

MATERIAL
SEE NOTE 2.

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DRAWN L. J. Berkeley 1/19/66
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APPROVED MIT 9/12/69
APPROVED MSC 9/16/69
DATE

K START TAPE ASSEMBLY

CODE IDENT NO.
SIZE C
DRAWING NO. 1026589
SCALE
SHEET OF

1026589

NOTICE – WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REVISIONS TDRR 37798

SYM	ZONE	DESCRIPTION	DR	CHK	DATE	APPROVED
	A	37829			25 Sept 69	

QTY	K START NO. AND REVISION	PROCESS SPEC. AND / OR OCP*	TITLE	EFF.
2	FIIC108K00068-01		E-MEMCRY LOAD	G&N211 S/C108

MASTER DOCUMENTATION LOCATED AT MIT/STG.

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. MATERIAL: METAL BASE TAPE, $1.000^{\pm.003}$ WIDTH, $3.500^{\pm.003}$ MILS THICK
3. * DENOTES OPERATIONAL CHECKOUT PROCEDURE

QTY REQD	PART OR IDENTIFYING NO.	MATERIAL OR NOTES	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATEPIALS

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
CAPACITOR VALUES ARE IN µf
RESISTOR VALUES ARE IN OHMS
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
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MATERIAL
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APPROVED MIT W G Murley 9/12/69
APPROVED MSC 9/16/69
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K START TAPE ASSEMBLY

CODE IDENT NO.
SIZE C
DRAWING NO. 1026596
SCALE
SHEET OF

1026596

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REVISIONS TDRR 37798

SYM	ZONE	DESCRIPTION	DR	CHK	DATE	APPROVED
	A	37829			25 Sept 69	
	B	37868			20 Nov 69	M

QTY	K START NO. AND REVISION	PROCESS SPEC. AND / OR OCP*	TITLE	EFF.
2	F11C108K00068-02		E-MEMORY LOAD	G&N211 S/C108

MASTER DOCUMENTATION LOCATED AT MIT/STG.

1026596

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. MATERIAL: METAL BASE TAPE, 1.000 $^{\pm .003}$ WIDTH, 3.500 $^{\pm .003}$ MILS THICK
3. * DENOTES OPERATIONAL CHECKOUT PROCEDURE

QTY REQD	PART OR IDENTIFYING NO.	MATERIAL OR NOTES	NOMENCLATURE OR DESCRIPTION	FIND NO.

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APPROVED MIT	M G Murley	9/12/69
APPROVED MSC		9/16/69

K START TAPE ASSEMBLY

CODE IDENT NO.	SIZE	DRAWING NO.
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REVISIONS TDRR 37798

SYM	ZONE	DESCRIPTION	DR	CHK	DATE	APPROVED

QTY	K START NO. AND REVISION	PROCESS SPEC. AND / OR OCP*	TITLE	EFF.
2	F11C108K00068-00		E-MEMORY LOAD	G&N211 S/C108

MASTER DOCUMENTATION LOCATED AT MIT/STG.

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. MATERIAL: METAL BASE TAPE, 1.000 $^{\pm.003}$ WIDTH, 3.500 $^{\pm.003}$ MILS THICK
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APPROVED MIT	W G Murley	9/12/69
APPROVED MSC		9/16/69

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REVISIONS TDRR 37798

SYM	ZONE	DESCRIPTION	DR	CHK	DATE	APPROVED

QTY	K START NO. AND REVISION	PROCESS SPEC. AND / OR OCP*	TITLE	EFF.
2	F11C108K00094-00		GN/LV SIMFLIGHT	G&N 211 S/C108

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NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. MATERIAL: METAL BASE TAPE, 1.000 $\pm .003$ WIDTH, 3.500 $\pm .003$ MILS THICK
3. * DENOTES OPERATIONAL CHECKOUT PROCEDURE

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APPROVED MIT M G Marley 9/12/69
APPROVED MSC 9/16/69
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K START TAPE ASSEMBLY

CODE IDENT NO.
SIZE C
DRAWING NO. 1026598
SCALE
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NOTICE – WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REVISIONS TDRR 37933

SYM	ZONE	DESCRIPTION	DR	CHK	DATE	APPROVED

QTY	K START NO. AND REVISION	PROCESS SPEC. AND / OR OCP*	TITLE	EFF.
2	F11C0720K00081-0		IMU PERFORMANCE	GSN 212 S/C 109

MASTER DOCUMENTATION LOCATED AT MIT/STG.

1026601

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. MATERIAL: METAL BASE TAPE, $1.000^{\pm 003}$ WIDTH, $3.500^{\pm 003}$ MILS THICK
3. * DENOTES OPERATIONAL CHECKOUT PROCEDURE

QTY REQD	PART OR IDENTIFYING NO.	MATERIAL OR NOTES	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

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RESISTOR VALUES ARE IN OHMS
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FRACTIONS ± DECIMALS ± ANGLES ±
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APPROVED MIT M C Murley 22 Dec 68
APPROVED MSC 1/24/68
DATE

K START TAPE ASSEMBLY

CODE IDENT NO.	SIZE	DRAWING NO.
	C	1026601

SCALE
SHEET OF

NOTICE – WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER: AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWIDE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REVISIONS TDRR 37933

SYM	ZONE	DESCRIPTION	DR	CHK	DATE	APPROVED
	A	TDRR 38026				M

QTY	K START NO. AND REVISION	PROCESS SPEC. AND / OR OCP*	TITLE	EFF.
2	F11C0723K00094-1		GN/LV SIMFLIGHT	G&N212 S/C109

MASTER DOCUMENTATION LOCATED AT MIT/STG.

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. MATERIAL: METAL BASE TAPE, 1.000 $^{\pm .003}$ WIDTH, 3.500 $^{\pm .003}$ MILS THICK
3. * DENOTES OPERATIONAL CHECKOUT PROCEDURE

NEXT ASSY	USED ON
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QTY REQD	PART OR IDENTIFYING NO.	MATERIAL OR NOTES	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATEPIALS

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APPROVED MSC
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ASSEMBLY

CODE IDENT NO.
SIZE C
DRAWING NO. 1026608
SCALE
SHEET OF

NOTICE – WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REVISIONS TDRR 37933

SYM	ZONE	DESCRIPTION	DR	CHK	DATE	APPROVED
						M

QTY	K START NO. AND REVISION	PROCESS SPEC. AND / OR OCP*	TITLE	EFF.
2	F11C0723K00094-0c		GN/LV SIMFLIGHT	G&N212 S/C109

MASTER DOCUMENTATION LOCATED AT MIT/STG.

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. MATERIAL: METAL BASE TAPE, $1.000^{\pm.003}$ WIDTH, $3.500^{\pm.003}$ MILS THICK
3. * DENOTES OPERATIONAL CHECKOUT PROCEDURE

QTY REQD	PART OR IDENTIFYING NO.	MATERIAL OR NOTES	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATEPIALS

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APPROVED MIT 22 Dec '69
APPROVED MSC
DATE

K START TAPE ASSEMBLY

CODE IDENT NO.
SIZE C
DRAWING NO. 1026608
SCALE
SHEET OF

NOTICE – WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REVISIONS TDRR 37933

SYM	ZONE	DESCRIPTION	DR	CHK	DATE	APPROVED
	A	TDRR 37999			23Jan70	

QTY	K START NO. AND REVISION	PROCESS SPEC. AND / OR OCP*	TITLE	EFF.
2	F11C0720K00068-2		E MEMORY LOAD	G&N 212 S/C 109

MASTER DOCUMENTATION LOCATED AT MIT/STG.

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. MATERIAL: METAL BASE TAPE, 1.000 $^{\pm003}$ WIDTH, 3.500 $^{\pm003}$ MILS THICK
3. * DENOTES OPERATIONAL CHECKOUT PROCEDURE

QTY REQD	PART OR IDENTIFYING NO.	MATERIAL OR NOTES	NOMENCLATURE OR DESCRIPTION	FIND NO.

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FRACTIONS ± DECIMALS ± ANGLES ±
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APPROVED MIT McKinley 22 Dec '69
APPROVED MSC A Cook
DATE

K START TAPE ASSEMBLY

CODE IDENT NO.
SIZE C
DRAWING NO. 1026610
SCALE
SHEET OF

1026610

NOTICE – WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REVISIONS TDRR 37933						
SYM	ZONE	DESCRIPTION	DR	CHK	DATE	APPROVED

QTY	K START NO. AND REVISION	PROCESS SPEC. AND / OR OCP*	TITLE	EFF.
2	F11C0720K00068-0		E/MEMORY LOAD/	G&N 212 S/C 109

MASTER DOCUMENTATION LOCATED AT MIT/STG.

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. MATERIAL: METAL BASE TAPE, $1.000^{\pm.003}$ WIDTH, $3.500^{\pm.003}$ MILS THICK
3. * DENOTES OPERATIONAL CHECKOUT PROCEDURE

QTY REQD	PART OR IDENTIFYING NO.	MATERIAL OR NOTES	NOMENCLATURE OR DESCRIPTION	FIND NO.

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APPLICATION	

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TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
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MATERIAL
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APPROVED MSC [illegible] [illegible]
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K START TAPE
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CODE IDENT NO.
SIZE C
DRAWING NO. 1026610
SCALE
SHEET OF

1026610

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REVISIONS TDRR 37934

SYM	ZONE	DESCRIPTION	DR	CHK	DATE	APPROVED
	A	TDRR 37998			23 JAN 70	

QTY	K START NO. AND REVISION	PROCESS SPEC. AND / OR OCP*	TITLE	EFF.
2	F10L1310K00068-2		E MEMORY LOAD	G&N610 LM007

MASTER DOCUMENTATION LOCATED AT MIT/STG.

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. MATERIAL: METAL BASE TAPE, $1.000^{\pm 003}$ WIDTH, $3.500^{\pm 003}$ MILS THICK
3. * DENOTES OPERATIONAL CHECKOUT PROCEDURE

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REVISIONS TDRR 37934

SYM	ZONE	DESCRIPTION	DR	CHK	DATE	APPROVED
	A	TDRR 37998			23 JAN 70	M
	B	TDRR 38079				M

QTY	K START NO. AND REVISION	PROCESS SPEC. AND / OR OCP*	TITLE	EFF.
2	F10L1310K00068-3		E MEMORY LOAD	G&N610 LM007

MASTER DOCUMENTATION LOCATED AT MIT/STG.

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. MATERIAL: METAL BASE TAPE, 1.000 $\pm .003$ WIDTH, 3.500 $\pm .003$ MILS THICK
3. * DENOTES OPERATIONAL CHECKOUT PROCEDURE

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APPROVED MIT M G Hurley 22 Dec 69
APPROVED MSC 1-16
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2	FIOLI310K00068-0		E MEMORY LOAD	G8N610 LM007

MASTER DOCUMENTATION LOCATED AT MIT/STG.

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1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. MATERIAL: METAL BASE TAPE, 1.000 ±.003 WIDTH, 3.500 ±.003 MILS THICK
3. * DENOTES OPERATIONAL CHECKOUT PROCEDURE

QTY REQD	PART OR IDENTIFYING NO.	MATERIAL OR NOTES	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY	USED ON

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
CAPACITOR VALUES ARE IN μf
RESISTOR VALUES ARE IN OHMS
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING

MATERIAL
SEE NOTE 2.

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APPROVED MIT [illegible]
APPROVED MSC [illegible]
DATE

K START TAPE ASSEMBLY

CODE IDENT NO.
SIZE C
DRAWING NO. 1026611
SCALE
SHEET OF

NOTICE – WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REVISIONS TDRR 38263

SYM	ZONE	DESCRIPTION	DR	CHK	DATE	APPROVED

QTY	K START NO. AND REVISION	PROCESS SPEC. AND / OR OCP*	TITLE	EFF.
2	F11C1080K00081-0		IMU PERFORMANCE TEST	G&N 214 S/C 110

MASTER DOCUMENTATION LOCATED AT MIT/STG.

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. MATERIAL: METAL BASE TAPE, 1.000$^{\pm.003}$ WIDTH, 3.500$^{\pm.003}$ MILS THICK
3. * DENOTES OPERATIONAL CHECKOUT PROCEDURE

NEXT ASSY	USED ON
APPLICATION	

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FRACTIONS ± DECIMALS ± ANGLES ±
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MATERIAL
SEE NOTE 2.

QTY REQD	PART OR IDENTIFYING NO.	MATERIAL OR NOTES	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATEPIALS

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APPROVED MIT W. Mundy 3Nov7
APPROVED MSC
DATE

K START TAPE ASSEMBLY

CODE IDENT NO.
SIZE C
DRAWING NO. 1026621
SCALE
SHEET OF

1026621

NOTICE – WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REVISIONS TDRR 38264

SYM	ZONE	DESCRIPTION	DR	CHK	DATE	APPROVED
	A	TDRR 38301			11 DEC 70	

QTY	K START NO. AND REVISION	PROCESS SPEC. AND / OR OCP*	TITLE	EFF.
2	F10L1780-K00068-1		E MEMORY LOAD	G&N 611 LM008

MASTER DOCUMENTATION LOCATED AT MIT/STG.

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. MATERIAL: METAL BASE TAPE, $1.000^{\pm.003}$ WIDTH, $3.500^{\pm.003}$ MILS THICK
3. * DENOTES OPERATIONAL CHECKOUT PROCEDURE

QTY REQD	PART OR IDENTIFYING NO.	MATERIAL OR NOTES	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATEPIALS

NEXT ASSY	USED ON

APPLICATION

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DIMENSIONS ARE IN INCHES
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TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING

MATERIAL
SEE NOTE 2.

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APPROVED MIT W. Marley 3 Nov 70
APPROVED MSC ACW/mm
DATE

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K START TAPE
ASSEMBLY

CODE IDENT NO.
SIZE C
DRAWING NO. 1026627
SCALE
SHEET OF

1026627

NOTICE — WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REVISIONS TDRR 3826K

SYM	ZONE	DESCRIPTION	DR	CHK	DATE	APPROVED

QTY	K START NO. AND REVISION	PROCESS SPEC. AND / OR OCP*	TITLE	EFF.
2	F10L1780-K00068-0		E MEMORY LOAD	G&N 611 LM008

MASTER DOCUMENTATION LOCATED AT MIT/STG.

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. MATERIAL: METAL BASE TAPE, 1.000 ±.003 WIDTH, 3.500 ±.003 MILS THICK
3. * DENOTES OPERATIONAL CHECKOUT PROCEDURE

QTY REQD	PART OR IDENTIFYING NO.	MATERIAL OR NOTES	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATEPIALS

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± ± ±
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MATERIAL
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CODE IDENT NO.
SIZE C
DRAWING NO. 1026627
SCALE
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NOTICE – WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REVISIONS TDRR 38263

SYM	ZONE	DESCRIPTION	DR	CHK	DATE	APPROVED
	A	TDRR 38300				

QTY	K START NO. AND REVISION	PROCESS SPEC. AND / OR OCP*	TITLE	EFF.
2	F11C1080-K00068-*		E- MEMORY LOAD	G&N 214 S/C 110

MASTER DOCUMENTATION LOCATED AT MIT/STG.

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. MATERIAL: METAL BASE TAPE, $1.000^{\pm .003}$ WIDTH, $3.500^{\pm .003}$ MILS THICK
3. * DENOTES OPERATIONAL CHECKOUT PROCEDURE

QTY REQD	PART OR IDENTIFYING NO.	MATERIAL OR NOTES	NOMENCLATURE OR DESCRIPTION	FIND NO.

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APPROVED MSC
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CODE IDENT NO.
SIZE C
DRAWING NO. 1026628
SCALE
SHEET OF

NOTICE – WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REVISIONS TDRR 38263

SYM	ZONE	DESCRIPTION	DR	CHK	DATE	APPROVED

QTY	K START NO. AND REVISION	PROCESS SPEC. AND / OR OCP*	TITLE	EFF.
2	F11C1080-K00068-0		E- MEMORY LOAD	G&N 214 S/C 110

MASTER DOCUMENTATION LOCATED AT MIT/STG.

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. MATERIAL: METAL BASE TAPE, $1.000^{\pm.003}$ WIDTH, $3.500^{\pm.003}$ MILS THICK
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APPROVED MIT 3Nov70
APPROVED MSC
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CODE IDENT NO.
SIZE C
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REVISIONS – LL 38407

SYM	ZONE	DESCRIPTION	DR	CHK	DATE	APPROVED

QTY	K START NO. AND REVISION	PROCESS SPEC. AND / OR OCP*	TITLE	EFF.
2	F12C0720 K00078-0		SIMFLIGHT	G&N217 S/C 112

MASTER DOCUMENTATION LOCATED AT MIT/STG.

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. MATERIAL: METAL BASE TAPE, 1.000 $^{\pm.003}$ WIDTH, 3.500 $^{\pm.003}$ MILS THICK
3. * DENOTES OPERATIONAL CHECKOUT PROCEDURE

QTY REQD	PART OR IDENTIFYING NO.	MATERIAL OR NOTES	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATEPIALS

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APPLICATION

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RESISTOR VALUES ARE IN OHMS
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING

MATERIAL
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APPROVED MSC
DATE

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K START TAPE
ASSEMBLY

CODE IDENT NO.
SIZE C
DRAWING NO. 1026629
SCALE
SHEET OF

1026629

NOTICE – WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REVISIONS TDRR 38407

SYM	ZONE	DESCRIPTION	DR	CHK	DATE	APPROVED
	A	TDRR 38426			11 JUNE 71	(M)

QTY	K START NO. AND REVISION	PROCESS SPEC. AND / OR OCP*	TITLE	EFF.
2	F12C0720K00068-1		E-MEMORY LOAD	G&N217 S/C 112

MASTER DOCUMENTATION LOCATED AT MIT/STG.

1026636

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. MATERIAL: METAL BASE TAPE, $1.000^{\pm.003}$ WIDTH, $3.500^{\pm.003}$ MILS THICK
3. * DENOTES OPERATIONAL CHECKOUT PROCEDURE

QTY REQD	PART OR IDENTIFYING NO.	MATERIAL OR NOTES	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATEPIALS

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APPLICATION	

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TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING

MATERIAL
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APPROVED MSC		DATE

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CODE IDENT NO.	SIZE	DRAWING NO.
	C	1026636
SCALE		SHEET OF

NOTICE – WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REVISIONS TDRR 38407

SYM	ZONE	DESCRIPTION	DR	CHK	DATE	APPROVED
	A	TDRR 38426			11JUNE71	
	B	TDRR 38441			13JUL71	

QTY	K START NO. AND REVISION	PROCESS SPEC. AND / OR OCP*	TITLE	EFF.
2	F12C0720K00068-2		E-MEMORY LOAD	G&N217 S/C 112

MASTER DOCUMENTATION LOCATED AT MIT/STG.

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. MATERIAL: METAL BASE TAPE, $1.000^{\pm 003}$ WIDTH, $3.500^{\pm 003}$ MILS THICK
3. * DENOTES OPERATIONAL CHECKOUT PROCEDURE

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APPROVED MIT N. J. Mulley 3 May 71
APPROVED MSC
DATE

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CODE IDENT NO.
SIZE C
DRAWING NO. 1026636
SCALE
SHEET OF

NOTICE – WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REVISIONS TDRR 38408

SYM	ZONE	DESCRIPTION	DR	CHK	DATE	APPROVED
	A	TDRR 38427			11 JUNE 71	
	B	TDRR 38442			1 JULY 71	
	C	TDRR 38549				

QTY	K START NO. AND REVISION	PROCESS SPEC. AND / OR OCP*	TITLE	EFF.
2	F10L2100K00068-3		E-MEMORY LOAD	G&N 614 LM 010 + G&N 615 LM 011

MASTER DOCUMENTATION LOCATED AT MIT/STG.

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. MATERIAL: METAL BASE TAPE, 1.000$^{\pm .003}$ WIDTH, 3.500$^{\pm .003}$ MILS THICK
3. * DENOTES OPERATIONAL CHECKOUT PROCEDURE

QTY REQD	PART OR IDENTIFYING NO.	MATERIAL OR NOTES	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATEPIALS

NEXT ASSY	USED ON

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DIMENSIONS ARE IN INCHES
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TOLERANCES ON
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DO NOT SCALE THIS DRAWING

MATERIAL
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APPROVED MIT 3 May 71
APPROVED MSC
DATE

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ASSEMBLY

CODE IDENT NO.
SIZE C
DRAWING NO. 1026635
SCALE
SHEET OF

1026635

NOTICE – WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REVISIONS TDRR 38407

SYM	ZONE	DESCRIPTION	DR	CHK	DATE	APPROVED
A		TDRR 38426			11JUNE71	
B		TDRR 38441			1JULY71	
C		TDRR 38444			8JULY71	

QTY	K START NO. AND REVISION	PROCESS SPEC. AND / OR OCP*	TITLE	EFF.
2	F12C0720K00068-3		E-MEMORY LOAD	G&N217 S/C 112

MASTER DOCUMENTATION LOCATED AT MIT/STG.

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. MATERIAL: METAL BASE TAPE, 1.000 $^{\pm.003}$ WIDTH, 3.500 $^{\pm.003}$ MILS THICK
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APPROVED MIT [illegible] 3 May 71
APPROVED MSC
DATE

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CODE IDENT NO.
SIZE C
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SCALE
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REVISIONS TDRR 38407

SYM	ZONE	DESCRIPTION	DR	CHK	DATE	APPROVED
	A	TDRR 38426			11 JUNE 71	
	B	TDRR 38441			1 JULY 71	
	C	TDRR 38444			8 JULY 71	
	D	TDRR 38548				

QTY	K START NO. AND REVISION	PROCESS SPEC. AND / OR OCP*	TITLE	EFF.
2	F12C0720K00068-4		E-MEMORY LOAD	G&N217 S/C 112 G&N 215 S/C 113

MASTER DOCUMENTATION LOCATED AT MIT/STG.

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. MATERIAL: METAL BASE TAPE, 1.000 $^{\pm.003}$ WIDTH, 3.500 $^{\pm.003}$ MILS THICK
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QTY REQD	PART OR IDENTIFYING NO.	MATERIAL OR NOTES	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATEPIALS

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APPROVED MSC
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SHEET OF

1026636

NOTICE – WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REVISIONS TDRR 38407

SYM	ZONE	DESCRIPTION	DR	CHK	DATE	APPROVED

QTY	K START NO. AND REVISION	PROCESS SPEC. AND / OR OCP*	TITLE	EFF.
2	F12C0720K00068-0		E-MEMORY LOAD	G&N217 S/C 112

MASTER DOCUMENTATION LOCATED AT MIT/STG.

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. MATERIAL: METAL BASE TAPE, $1.000^{\pm.003}$ WIDTH, $3.500^{\pm.003}$ MILS THICK
3. * DENOTES OPERATIONAL CHECKOUT PROCEDURE

QTY REQD	PART OR IDENTIFYING NO.	MATERIAL OR NOTES	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATEPIALS

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
CAPACITOR VALUES ARE IN µf
RESISTOR VALUES ARE IN OHMS
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING

MATERIAL
SEE NOTE 2.

MIT
INSTRUMENTATION LAB
CAMBRIDGE, MASS.

DRAWN L. J. Berkeley 1/19/66
CHECKED
APPROVED
APPROVED
APPROVED MIT 3 May 71
APPROVED MSC
DATE

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

K START TAPE ASSEMBLY

CODE IDENT NO.
SIZE C
DRAWING NO. 1026636
SCALE
SHEET OF

NOTICE – WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REVISIONS TDRR 38108

SYM	ZONE	DESCRIPTION	DR	CHK	DATE	APPROVED

QTY	K START NO. AND REVISION	PROCESS SPEC. AND / OR OCP*	TITLE	EFF.
2	F10L2100K00078-0		SIMFLIGHT	G&N 614 LM010

MASTER DOCUMENTATION LOCATED AT MIT/STG.

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. MATERIAL: METAL BASE TAPE, $1.000^{\pm.003}$ WIDTH, $3.500^{\pm.003}$ MILS THICK
3. * DENOTES OPERATIONAL CHECKOUT PROCEDURE

QTY REQD	PART OR IDENTIFYING NO.	MATERIAL OR NOTES	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATEPIALS

NEXT ASSY	USED ON

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
CAPACITOR VALUES ARE IN µf
RESISTOR VALUES ARE IN OHMS
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING

MATERIAL
SEE NOTE 2.

MIT
INSTRUMENTATION LAB
CAMBRIDGE, MASS.

DRAWN L. J. Berkeley 1/19/66
CHECKED
APPROVED
APPROVED
APPROVED MIT W Muntz 3 May 71
APPROVED MSC
DATE

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

K START TAPE
ASSEMBLY

CODE IDENT NO.
SIZE C
DRAWING NO. 1026637
SCALE
SHEET OF

1026637

1026714 A

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327.
2. MATERIAL: MYLAR TAPE 1.000 ± .003 WIDE BY 3.5 ± .3 MILS THICK.

REVISIONS TDRR 37989

SYM	DESCRIPTION	CHG NO.	DATE	APPD.
A	REVISED PER TDRR 38266		3 NOV 70	RWH

QTY	K-START NO. AND REVISION	AGC PROGRAM	TITLE	EFF
2	F08C2820-K10550-00	SUNDISK 282	ALMS + INT TEST/RSTRT MON	CM109
2	F08C2820-K10550-1	SUNDISK 282	ALMS & INT TEST/RSTRT MON	CM112

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON

FRACTIONS	DECIMALS	ANGLES
+ −	+ −	+ −
− −	− −	− −

DO NOT SCALE THIS DRAWING

MATERIAL SEE NOTE 2

APPROVAL

AC ELECTRONICS DIVISION
GENERAL MOTORS CORP. MILWAUKEE WIS.

DRAWN R. L. [illegible] DATE 8 JAN 70
CHECKED Friede 8 JAN 70
APPROVAL O. Korslin
CONTRACT NAS 9-10356
NASA APPROVAL N/A
APPROVAL Erhart 1/8/70

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

K-START TAPE
ASSEMBLY
ALMS+INT TEST/
RSTRT MON

SIZE	CODE IDENT NO.	
B	99974	1026714

SCALE ——
SHEET 1 OF 1

MIL 10778-D 11-16-64

REVISIONS TDRR 37989

SYM	DESCRIPTION	CHG NO.	DATE	APPD.

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327.
2. MATERIAL: MYLAR TAPE 1.000 ± .003 WIDE BY 3.5 ± .3 MILS THICK.

QTY	K-START NO. AND REVISION	AGC PROGRAM	TITLE	EFF
2	F08C2820-K10550-00	SUNDISK 282	ALMS + INT TEST/RSTRT MON	CM109

NEXT ASSY	USED ON

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS + — — —
DECIMALS + — — —
ANGLES + — — —
DO NOT SCALE THIS DRAWING

MATERIAL
SEE NOTE 2

APPROVAL

AC ELECTRONICS DIVISION
GENERAL MOTORS CORP. MILWAUKEE WIS.

DRAWN R. LaDue DATE 8 JAN 70
CHECKED Guide 8 JAN 70
APPROVAL O. Korslin
CONTRACT NAS 9-10356
NASA APPROVAL N/A
APPROVAL ErAnt 1/8/70

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

K-START TAPE
ASSEMBLY
ALMS+INT TEST/
RSTRT MON

SIZE B
CODE IDENT NO. 99974
1026714
SCALE —
SHEET 1 OF 1

MIL 10778 D 11-16-64

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327.
2. MATERIAL: MYLAR TAPE 1.000 ± .003 WIDE BY 3.5 ± .3 MILS THICK.

REVISIONS TDRR 37990

SYM	DESCRIPTION	CHG NO.	DATE	APPD.
A	REVISED PER TDRR 38267		3 NOV 70	RWH

QTY	K-START NO. AND REVISION	AGC PROGRAM	TITLE	EFF
2	F10L0991-K10550-00	LUMINARY 99R1	ALMS + INT TEST/RSTRT MON	LM7
2	F10L0991-K10550-1	LUMINARY 99R1	ALMS & INT TEST/RSTRT MON	LM10

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS + – – –
DECIMALS + – – –
ANGLES + – – –
DO NOT SCALE THIS DRAWING

MATERIAL SEE NOTE 2

APPROVAL

AC ELECTRONICS DIVISION
GENERAL MOTORS CORP. MILWAUKEE WIS.

DRAWN DATE 8 JAN 70
CHECKED 8 JAN 70
APPROVAL
CONTRACT NAS 9-10356

NASA APPROVAL N/A
APPROVAL 1/8/70

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

K-START TAPE
ASSEMBLY
ALMS + INT TEST/
RSTRT MON

SIZE	CODE IDENT NO.	
B	99974	1026715

SCALE ——
SHEET 1 OF 1

MIL 1077B D 11 16 64

1026715

REVISIONS TDRR 37990

SYM	DESCRIPTION	CHG NO.	DATE	APPD.

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327.
2. MATERIAL: MYLAR TAPE 1.000 ±.003 WIDE BY 3.5 ±.3 MILS THICK.

QTY	K-START NO. AND REVISION	AGC PROGRAM	TITLE	EFF
2	F10L0991-K10550-00	LUMINARY 99R1	ALMS +INT TEST/RSTRT MON	LM7

NEXT ASSY	USED ON

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING

MATERIAL SEE NOTE 2

APPROVAL

AC ELECTRONICS DIVISION
GENERAL MOTORS CORP. MILWAUKEE WIS

DRAWN R. [illegible] DATE 8 JAN 70
CHECKED [illegible] 8 JAN 70
APPROVAL O. Raskin
CONTRACT NAS 9-10356
NASA APPROVAL N/A
APPROVAL [illegible] 1/8/70

MANNED SPACECRAFT CENTER
HOUSTON TEXAS

K-START TAPE ASSEMBLY ALMS + INT TEST/ RSTRT MON

SIZE	CODE IDENT NO.	
B	99974	1026715

SCALE —— SHEET 1 OF 1

MIL 10778 D 11-16-64

1026720 1A1

TDRR 38091

REVISIONS				
SYM	DESCRIPTION	CHG NO.	DATE	APPD.
A	REVISED PER TDRR 38099		12 MAY 70	RW / CP

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327.
2. MATERIAL: MYLAR TAPE 1.000 ±.003 WIDE BY 3.5 ±.3 MILS THICK.

QTY	K-START NO. AND REVISION	AGC PROGRAM	TITLE	EFF
2	F08C2820-K10553-00	SUNDISK 282	MONITOR CHANNEL 77 ALARMS	CM-110
2	F08C2820-K10553-1	DISK 282	MONITOR CHANNEL 77 ALARMS	CM-110

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING

MATERIAL SEE NOTE 2
APPROVAL

AC ELECTRONICS DIVISION
GENERAL MOTORS CORP. MILWAUKEE WIS.
DRAWN Janowiak DATE 29 JAN 70
CHECKED Nimbie 30 JAN 70
APPROVAL O. Korslin
CONTRACT NAS 9-10356
NASA APPROVAL N/A
~~MIT~~ APPROVAL 4/10/70

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

K-START TAPE
ASSEMBLY -
MONITOR CHANNEL 77 ALARMS

SIZE B
CODE IDENT NO. 99974
1026720
SCALE —
SHEET 1 OF 1

MIL 1077B D 11-16-64

1026720

TDRR 38091

REVISIONS

SYM	DESCRIPTION	CHG NO.	DATE	APPD.

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327.
2. MATERIAL: MYLAR TAPE 1.000 ±.003 WIDE BY 3.5 ±.3 MILS THICK.

QTY	K-START NO. AND REVISION	AGC PROGRAM	TITLE	EFF
2	F08C2820-K10553-00	SUNDISK 282	MONITOR CHANNEL 77 ALARMS	CM-110

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON

FRACTIONS	DECIMALS	ANGLES
+ −	+ −	+ −
− −	− −	− −

DO NOT SCALE THIS DRAWING

MATERIAL
SEE NOTE 2

APPROVAL

AC ELECTRONICS DIVISION
GENERAL MOTORS CORP. MILWAUKEE WIS.

DRAWN Janowiak DATE 29 JAN 70
CHECKED Nimbie 30 JAN 70
APPROVAL O. Korslin
CONTRACT NAS 9-10356

NASA APPROVAL N/A
~~MIT~~ APPROVAL 4/10/70

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

K-START TAPE
ASSEMBLY -
MONITOR CHANNEL 77 ALARMS

SIZE	CODE IDENT NO.	
B	99974	1026720

SCALE —— SHEET 1 OF 1

MIL 10778-D 11-16-64

1026748-B

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327.
2. MATERIAL: MYLAR TAPE 1.000 ±.003 WIDE BY 3.5 ±.3 MILS THICK.

REVISIONS

SYM	DESCRIPTION	CHG NO.	DATE	APPD.
B	INITIAL RELEASE CLASS A PER TDRR 38253		12 OCT 70	JLS

QTY	K-START NO. AND REVISION	AGC PROGRAM	TITLE	EFF
2	F11C1080-K10598-0	COMANCHE 108	OPT H/C SLEW RATE & RATE S/F	CM110

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS + − DECIMALS + − ANGLES + −
DO NOT SCALE THIS DRAWING
MATERIAL SEE NOTE 2
APPROVAL

DELCO ELECTRONICS DIV
GENERAL MOTORS CORP. MILWAUKEE WIS.
DRAWN A. SANDERSON DATE 16 JULY 70
CHECKED J. REPINSKI 17 JULY 70
APPROVAL O. Korslin
CONTRACT NAS 9-10356
NASA APPROVAL N/A
CCB APPROVAL

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

K-START TAPE ASSEMBLY OPT H/C SLEW RATE & RATE S/F

SIZE B
CODE IDENT NO. 99974
1026748
SCALE —
SHEET 1 OF 1

MIL 10778-D 11-16-64

1026758

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327.
2. MATERIAL: MYLAR TAPE 1.000 ± .003 WIDE BY 3.5 ± .3 MILS THICK.

REVISIONS TDRR 38404

SYM	DESCRIPTION	CHG NO.	DATE	APPD.

QTY	K-START NO. AND REVISION	AGC PROGRAM	TITLE	EFF
2	F12C0720-K10527-00	ARTEMIS-72	GN&C INTERFACE TEST	CM-112

NEXT ASSY	USED ON

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS + — — —
DECIMALS + — — —
ANGLES + — — —
DO NOT SCALE THIS DRAWING

MATERIAL SEE NOTE 2

APPROVAL

DELCO ELECTRONICS DIV
GENERAL MOTORS CORP. MILWAUKEE WIS.

DRAWN J. WOLSKI DATE 11 MAR 71
CHECKED 12MAR 71
APPROVAL O Korslin
CONTRACT NAS 9-10356
NASA APPROVAL N/A
CCB APPROVAL E N Aust 7/1/71

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

K-START TAPE
ASSEMBLY-
GN&C INTERFACE TEST

SIZE B
CODE IDENT NO. 99974
1026758

SCALE ——
SHEET 1 OF 1

MIL 10778 D 11-16-64

1026759

REVISIONS	TDRR 38404			
SYM	DESCRIPTION	CHG NO.	DATE	APPD.

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327.
2. MATERIAL: MYLAR TAPE 1.000 ± .003 WIDE BY 3.5 ± .3 MILS THICK.

QTY	K-START NO. AND REVISION	AGC PROGRAM	TITLE	EFF
2	F12C0720-K10528-00	ARTEMIS 72	I.U. INTERFACE TEST	CM-112

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING

MATERIAL SEE NOTE 2

APPROVAL

DELCO ELECTRONICS DIV
GENERAL MOTORS CORP. MILWAUKEE WIS.

DRAWN J. WOLSKI DATE 11-MAR 71
CHECKED 12 MAR 71
APPROVAL
CONTRACT NAS 9-10356
NASA APPROVAL N/A
CCB APPROVAL 4/15/7

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

K-START TAPE
ASSEMBLY-
I.U. INTERFACE TEST

SIZE B
CODE IDENT NO. 99974
1026759
SCALE —
SHEET 1 OF 1

MIL 1077B-D 11-16 64

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327.
2. MATERIAL: MYLAR TAPE 1.000 ±.003 WIDE BY 3.5 ±.3 MILS THICK.

REVISIONS TDRR 38404

SYM	DESCRIPTION	CHG NO.	DATE	APPD.

QTY	K-START NO. AND REVISION	AGC PROGRAM	TITLE	EFF
2	F12C0720-K10529-00	ARTEMIS-72	COUNTDOWN INTERFACE TEST	CM-112

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS + − − −
DECIMALS + − − −
ANGLES + − − −
DO NOT SCALE THIS DRAWING
MATERIAL SEE NOTE 2
APPROVAL

DELCO ELECTRONICS DIV
GENERAL MOTORS CORP. MILWAUKEE WIS.
DRAWN J. WOLSKI DATE 11 MAR71
CHECKED 12MAR71
APPROVAL
CONTRACT NAS 9-10356
NASA APPROVAL N/A
CCB APPROVAL 4/15/71

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

K-START TAPE ASSEMBLY-
COUNTDOWN INTERFACE TEST

SIZE B
CODE IDENT NO. 99974
1026760
SCALE ——
SHEET 1 OF 1

MIL 1077B D 11 16 64

1026761

REVISIONS TDRR 38404

SYM	DESCRIPTION	CHG NO.	DATE	APPD.

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327.
2. MATERIAL: MYLAR TAPE 1.000 ±.003 WIDE BY 3.5 ±.3 MILS THICK.

QTY	K-START NO. AND REVISION	AGC PROGRAM	TITLE	EFF
2	F12C0720-K10530-00	ARTEMIS-72	CM SAMOD (CDU OP CHK)	CM-112

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± — DECIMALS ± — ANGLES ± —
DO NOT SCALE THIS DRAWING
MATERIAL SEE NOTE 2
APPROVAL

DELCO ELECTRONICS DIV
GENERAL MOTORS CORP. MILWAUKEE WIS.
DRAWN J. WOLSKI DATE 11 MAR 71
CHECKED [illegible] 12 MAR 71
APPROVAL O Korslin
CONTRACT NAS 9-10356
NASA APPROVAL N/A
CCB APPROVAL E N Aust 7/15/71

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

K-START TAPE
ASSEMBLY-
CM SAMOD (CDU OP CHK)

SIZE B
CODE IDENT NO. 99974
1026761
SCALE —
SHEET 1 OF 1

MIL 10778 D 11 16 64

1026762

REVISIONS TDRR 38404

SYM	DESCRIPTION	CHG NO.	DATE	APPD.

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327.
2. MATERIAL: MYLAR TAPE 1.000 ±.003 WIDE BY 3.5 ±.3 MILS THICK.

QTY	K-START NO. AND REVISION	AGC PROGRAM	TITLE	EFF
2	F12C0720-K10531-00	ARTEMIS-72	CM G&N OPERATIONAL	CM-112

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS + — — — DECIMALS + — — — ANGLES + — — —
DO NOT SCALE THIS DRAWING
MATERIAL SEE NOTE 2
APPROVAL

DELCO ELECTRONICS DIV
GENERAL MOTORS CORP. MILWAUKEE WIS.
DRAWN J. WOLSKI DATE 11 MAR 71
CHECKED 12 MAR 71
APPROVAL
CONTRACT NAS 9-10356
NASA APPROVAL N/A
CCB ~~MIT~~ APPROVAL 4/15/71

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

K-START TAPE
ASSEMBLY-
CM G&N OPERATIONAL

SIZE	CODE IDENT NO.	
B	99974	1026762

SCALE —
SHEET 1 OF 1

MIL 10778 D 11-16-64

REVISIONS TDRR 38404

SYM	DESCRIPTION	CHG NO.	DATE	APPD.

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327.
2. MATERIAL: MYLAR TAPE 1.000 ±.003 WIDE BY 3.5 ±.3 MILS THICK.

QTY	K-START NO. AND REVISION	AGC PROGRAM	TITLE	EFF
2	F12C0720-K10538-00	ARTEMIS-72	CMC SELF TEST	CM-112

APPLICATION	
NEXT ASSY	USED ON

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS + — — —
DECIMALS + — — —
ANGLES + — — —
DO NOT SCALE THIS DRAWING

MATERIAL SEE NOTE 2

APPROVAL

DELCO ELECTRONICS DIV
GENERAL MOTORS CORP. MILWAUKEE WIS.

DRAWN J. WOLSKI DATE 11 MAR 71
CHECKED 12 MAR 71
APPROVAL
CONTRACT NAS 9-10356
NASA APPROVAL N/A
CCB ~~MIT~~ APPROVAL 7/15/71

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

K-START TAPE
ASSEMBLY -
CMC SELF TEST

SIZE B
CODE IDENT NO. 99974
1026763
SCALE ——
SHEET 1 OF 1

1026764

REVISIONS TDRR 38404

SYM	DESCRIPTION	CHG NO.	DATE	APPD.

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327.
2. MATERIAL: MYLAR TAPE 1.000 ±.003 WIDE BY 3.5 ±.3 MILS THICK.

QTY	K-START NO. AND REVISION	AGC PROGRAM	TITLE	EFF
2	F12C0720-K10543-00	ARTEMIS-72	VHF RANGING	CM-112

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON

FRACTIONS	DECIMALS	ANGLES
+ —	+ —	+ —
- —	- —	- -

DO NOT SCALE THIS DRAWING

MATERIAL
SEE NOTE 2

APPROVAL

DELCO ELECTRONICS DIV
GENERAL MOTORS CORP. MILWAUKEE WIS.

DRAWN J.WOLSKI DATE 11MAR71
CHECKED 12 MAR 71
APPROVAL
CONTRACT NAS 9-10356

NASA APPROVAL N/A
CCB ~~MIT~~ APPROVAL E N Austin 4/15/71

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

K-START TAPE
ASSEMBLY-
VHF RANGING

SIZE B
CODE IDENT NO. 99974
1026764
SCALE —
SHEET 1 OF 1

MIL 1077B D 11 16 64

1026765

REVISIONS TDRR 38404

SYM	DESCRIPTION	CHG NO.	DATE	APPD.

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327.
2. MATERIAL: MYLAR TAPE 1.000 ±.003 WIDE BY 3.5 ±.3 MILS THICK.

QTY	K-START NO. AND REVISION	AGC PROGRAM	TITLE	EFF
2	F12C0720-K10550-00	ARTEMIS-72	ALMS & INT TEST/ RSTRT MON	CM-112

NEXT ASSY	USED ON

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS + — — — DECIMALS + — — — ANGLES + — — —
DO NOT SCALE THIS DRAWING
MATERIAL SEE NOTE 2
APPROVAL

DELCO ELECTRONICS DIV
GENERAL MOTORS CORP. MILWAUKEE WIS.
DRAWN J. WOLSKI DATE 11 MAR 71
CHECKED 12 MAR 71
APPROVAL
CONTRACT NAS 9-10356
NASA APPROVAL N/A
CCB APPROVAL E N Austin 4/15/71

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

K-START TAPE
ASSEMBLY-
ALMS & INT TEST/RSTRT MON

SIZE B
CODE IDENT NO. 99974
1026765
SCALE —
SHEET 1 OF 1

MIL 10778 D 11 16 64

1026766

REVISIONS TDRR 38404				
SYM	DESCRIPTION	CHG NO.	DATE	APPD.

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327.
2. MATERIAL: MYLAR TAPE 1.000 ±.003 WIDE BY 3.5 ±.3 MILS THICK.

QTY	K-START NO. AND REVISION	AGC PROGRAM	TITLE	EFF
2	F12C0720-K10557-00	ARTEMIS-72	CH 30-33 MONITOR (AGAIN)	CM-112

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± — DECIMALS ± — ANGLES ± —
DO NOT SCALE THIS DRAWING
MATERIAL SEE NOTE 2
APPROVAL

DELCO ELECTRONICS DIV
GENERAL MOTORS CORP. MILWAUKEE WIS.
DRAWN J. WOLSKI DATE 11 MAR 71
CHECKED 12 MAR 71
APPROVAL
CONTRACT NAS 9-10356
NASA APPROVAL N/A
CCB ~~MIT~~ APPROVAL 4/15/71

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

K-START TAPE
ASSEMBLY -
CH 30-33 MONITOR (AGAIN)

SIZE B
CODE IDENT NO. 99974
1026766
SCALE —
SHEET 1 OF 1

MIL 10778 D 11-16-64

1026767

REVISIONS TDRR 38404

SYM	DESCRIPTION	CHG NO.	DATE	APPD.

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327.
2. MATERIAL: MYLAR TAPE 1.000 ±.003 WIDE BY 3.5 ±.3 MILS THICK.

QTY	K-START NO. AND REVISION	AGC PROGRAM	TITLE	EFF
2	F12C0720-K10579-00	ARTEMIS-72	TVC/RCS DAP POLARITY TEST	CM-112

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON

FRACTIONS	DECIMALS	ANGLES
+ −	+ −	+ −
− −	− −	− −

DO NOT SCALE THIS DRAWING
MATERIAL SEE NOTE 2
APPROVAL

DELCO ELECTRONICS DIV
GENERAL MOTORS CORP. MILWAUKEE WIS.

DRAWN J. WOLSKI DATE 11 MAR 71
CHECKED 12 MAR 71
APPROVAL
CONTRACT NAS 9-10356
NASA APPROVAL N/A
CCB ~~MIT~~ APPROVAL 4/15/71

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

K-START TAPE ASSEMBLY-
TVC/RCS DAP POLARITY TEST

SIZE	CODE IDENT NO.	
B	99974	1026767

SCALE — SHEET 1 OF 1

MIL 10778 D 11-16-64

1026769

REVISIONS *TDRR 38404*

SYM	DESCRIPTION	CHG NO.	DATE	APPD.

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327.
2. MATERIAL: MYLAR TAPE 1.000 ±.003 WIDE BY 3.5 ±.3 MILS THICK.

QTY	K-START NO. AND REVISION	AGC PROGRAM	TITLE	EFF
2	F12C0720-K10598-00	ARTEMIS-72	OPT H/C SLEW RATE & RATE S.F.	CM-112

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON

FRACTIONS	DECIMALS	ANGLES
+ —	+ —	+ —
— —	— —	— —

DO NOT SCALE THIS DRAWING

MATERIAL
SEE NOTE 2

APPROVAL

DELCO ELECTRONICS DIV
GENERAL MOTORS CORP. MILWAUKEE WIS.

DRAWN J.WOLSKI DATE 11 MAR 71
CHECKED 12 MAR 71
APPROVAL Korelin
CONTRACT NAS 9-10356
NASA APPROVAL N/A
CCB APPROVAL E N Austin 4/15/71

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

K-START TAPE ASSEMBLY - OPT H/C SLEW RATE & RATE S.F.

SIZE	CODE IDENT NO.	
B	99974	1026769
SCALE —		SHEET 1 OF 1

MIL 1077B D 11 16 64

1026770

REVISIONS TDRR 38405

SYM	DESCRIPTION	CHG NO.	DATE	APPD.

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327.
2. MATERIAL: MYLAR TAPE 1.000 ± .003 WIDE BY 3.5 ± .3 MILS THICK.

QTY	K-START NO. AND REVISION	AGC PROGRAM	TITLE	EFF
2	F10L2100-K10515-00	LUMINARY 210	MATED SYSTEMS C/O	LM-10

NEXT ASSY	USED ON

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON

FRACTIONS	DECIMALS	ANGLES
+ —	+ —	+ —
— —	— —	— —

DO NOT SCALE THIS DRAWING

MATERIAL
SEE NOTE 2

APPROVAL

AC ELECTRONICS DIVISION
GENERAL MOTORS CORP. MILWAUKEE WIS.

DRAWN M. BALTMANIS DATE 30MAR71
CHECKED J. REPINSKI 1APR71
APPROVAL O. Koralin
CONTRACT NAS 9-10356

NASA APPROVAL N/A
CCB APPROVAL 4/15/71

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

K-START TAPE
ASSEMBLY-
MATED SYSTEMS C/O

SIZE	CODE IDENT NO.	
B	99974	1026770

SCALE —
SHEET 1 OF 1

1LL9201

REVISIONS TDRR 38405

SYM	DESCRIPTION	CHG NO.	DATE	APPD.

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327.
2. MATERIAL: MYLAR TAPE 1.000 ± .003 WIDE BY 3.5 ± .3 MILS THICK.

QTY	K-START NO. AND REVISION	AGC PROGRAM	TITLE	EFF
2	F10L2100-K10516-0C	LUMINARY210	STAGED SYSTEMS C/O	LM-10

NEXT ASSY	USED ON

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± — DECIMALS ± — ANGLES ± —
DO NOT SCALE THIS DRAWING
MATERIAL SEE NOTE 2
APPROVAL

AC ELECTRONICS DIVISION
GENERAL MOTORS CORP. MILWAUKEE WIS.
DRAWN M. BALTMANIS DATE 30MAR71
CHECKED J. REPINSKI 1APR71
APPROVAL O. Korslin
CONTRACT NAS 9-10356
NASA APPROVAL N/A
CCB APPROVAL E N Aut 4/17/71

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

K-START TAPE
ASSEMBLY-
STAGED SYSTEMS C/O

SIZE B
CODE IDENT NO. 99974
1026771
SCALE —
SHEET 1 OF 1

1026772

REVISIONS TDRR 38405

SYM	DESCRIPTION	CHG NO.	DATE	APPD.

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327.
2. MATERIAL: MYLAR TAPE 1.000 ±.003 WIDE BY 3.5 ±.3 MILS THICK.

QTY	K-START NO. AND REVISION	AGC PROGRAM	TITLE	EFF
2	F10L2100-K10517-00	LUMINARY 210	VALVE SIG. PROFILE	LM-10

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS + — — — DECIMALS + — — — ANGLES + — — —
DO NOT SCALE THIS DRAWING
MATERIAL SEE NOTE 2
APPROVAL

AC ELECTRONICS DIVISION
GENERAL MOTORS CORP. MILWAUKEE WIS.
DRAWN M. BALTMANIS DATE 30MAR71
CHECKED J. REPINSKI 1APR71
APPROVAL O. Korslin
CONTRACT NAS 9-10356
NASA APPROVAL N/A
CCB ~~SEET~~ APPROVAL E N Aust 4/10/71

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

K-START TAPE
ASSEMBLY-
VALVE SIG. PROFILE

SIZE B
CODE IDENT NO. 99974
1026772
SCALE —
SHEET 1 OF 1

MIL 1077B D 11 16 64

1026773

REVISIONS	TDRR 38405			
SYM	DESCRIPTION	CHG NO.	DATE	APPD.

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327.

2. MATERIAL: MYLAR TAPE 1.000 ±.003 WIDE BY 3.5 ±.3 MILS THICK.

QTY	K-START NO. AND REVISION	AGC PROGRAM	TITLE	EFF
2	F10L2100-K10518-00	LUMINARY 210	LMACA-LGC I/F	LM-10

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS + − − −
DECIMALS + − − −
ANGLES + − − −
DO NOT SCALE THIS DRAWING
MATERIAL SEE NOTE 2
APPROVAL

AC ELECTRONICS DIVISION
GENERAL MOTORS CORP. MILWAUKEE WIS.
DRAWN M. BALTMANIS DATE 30MAR71
CHECKED J. REPINSKI 1APR71
APPROVAL
CONTRACT NAS 9-10356
NASA APPROVAL N/A
CCB ~~MET~~ APPROVAL E N Austin 4/15/71

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

K-START TAPE ASSEMBLY-
LMACA-LGC I/F

SIZE B
CODE IDENT NO. 99974
1026773
SCALE —
SHEET 1 OF 1

MIL 1077B D 11 16 64

1026774

REVISIONS	TDRR 38405			
SYM	DESCRIPTION	CHG NO.	DATE	APPD.

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327.
2. MATERIAL: MYLAR TAPE 1.000 ±.003 WIDE BY 3.5 ±.3 MILS THICK.

QTY	K-START NO. AND REVISION	AGC PROGRAM	TITLE	EFF
2	F10L2100-K10530-00	LUMINARY 210	LM SAMOD (CDU OPCK)	LM-10

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS DECIMALS ANGLES
± ± ±
DO NOT SCALE THIS DRAWING
MATERIAL
SEE NOTE 2
APPROVAL

AC ELECTRONICS DIVISION
GENERAL MOTORS CORP. MILWAUKEE WIS.
DRAWN M. BALTMANIS DATE 30MAR71
CHECKED J. REPINSKI 1 APR 71
APPROVAL O Koslin
CONTRACT NAS 9-10356
NASA APPROVAL N/A
CCB APPROVAL E N Aut 4/15/71

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

K-START TAPE
ASSEMBLY-
LM SAMOD (CDU OPCK)

SIZE B
CODE IDENT NO. 99974
1026774
SCALE —
SHEET 1 OF 1

MIL 10778 D 11 16 64

1026775

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327.

2. MATERIAL: MYLAR TAPE 1.000 ±.003 WIDE BY 3.5 ±.3 MILS THICK.

REVISIONS TDRR 38405

SYM	DESCRIPTION	CHG NO.	DATE	APPD.

QTY	K-START NO. AND REVISION	AGC PROGRAM	TITLE	EFF
2	F10L2100-K10531-00	LUMINARY 210	LM G&N OPERATIONAL	LM-10

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON

FRACTIONS	DECIMALS	ANGLES
+ –	+ –	+ –
– –	– –	– –

DO NOT SCALE THIS DRAWING

MATERIAL SEE NOTE 2

APPROVAL

AC ELECTRONICS DIVISION
GENERAL MOTORS CORP. MILWAUKEE WIS.

DRAWN M. BALTMANIS DATE 30 MAR 71
CHECKED J. REPINSKI 1 APR 71
APPROVAL O. Korelin
CONTRACT NAS 9-10356

NASA APPROVAL N/A
CCB ~~MIT~~ APPROVAL E N Aust 4/15/71

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

K-START TAPE
ASSEMBLY-
LM G&N OPERATIONAL

SIZE	CODE IDENT NO.	
B	99974	1026775

SCALE ——

SHEET 1 OF 1

MIL 1077B D 11 16 64

1026776

REVISIONS TDRR 38405				
SYM	DESCRIPTION	CHG NO.	DATE	APPD.

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327.
2. MATERIAL: MYLAR TAPE 1.000 ±.003 WIDE BY 3.5 ±.3 MILS THICK.

QTY	K-START NO. AND REVISION	AGC PROGRAM	TITLE	EFF
2	F10L2100-K10532-00	LUMINARY 210	RCS CWEA-1	LM-10

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON

FRACTIONS	DECIMALS	ANGLES
+ —	+ —	+ —
— —	— —	— —

DO NOT SCALE THIS DRAWING

MATERIAL SEE NOTE 2

APPROVAL

AC ELECTRONICS DIVISION
GENERAL MOTORS CORP MILWAUKEE WIS

DRAWN M. BALTMANIS DATE 30MAR71
CHECKED J. REPINSKI 1APR71
APPROVAL C. Korslin
CONTRACT NAS 9-10356

NASA APPROVAL N/A
CCB ~~ ~~ APPROVAL E N Amt 4/15/71

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

K-START TAPE
ASSEMBLY-
RCS CWEA-1

SIZE	CODE IDENT NO.	
B	99974	1026776

SCALE

SHEET 1 OF 1

1026777

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327.
2. MATERIAL: MYLAR TAPE 1.000 ±.003 WIDE BY 3.5 ±.3 MILS THICK.

REVISIONS TDRR 38405				
SYM	DESCRIPTION	CHG NO.	DATE	APPD.

QTY	K-START NO. AND REVISION	AGC PROGRAM	TITLE	EFF
2	F10L2100-K10533-00	LUMINARY 210	RCS CWEA-2	LM-10

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON

FRACTIONS	DECIMALS	ANGLES
+ —	+ —	+ —
— —	— —	— —

DO NOT SCALE THIS DRAWING

MATERIAL SEE NOTE 2

APPROVAL

AC ELECTRONICS DIVISION
GENERAL MOTORS CORP. MILWAUKEE WIS

DRAWN M. BALTMANIS DATE 30MAR71
CHECKED J. REPINSKI 1APR71
APPROVAL C. Korshin
CONTRACT NAS 9-10356

NASA APPROVAL N/A
CCB ~~SET~~ APPROVAL E N Aunt 4/15/71

MANNED
SPACECRAFT CENTER
HOUSTON TEXAS

K-START TAPE
ASSEMBLY-
RCS CWEA-2

SIZE	CODE IDENT NO.	
B	99974	1026777

SCALE

SHEET 1 OF 1

1026778

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327.
2. MATERIAL: MYLAR TAPE 1.000 ±.003 WIDE BY 3.5 ±.3 MILS THICK.

REVISIONS TDRR 38405

SYM	DESCRIPTION	CHG NO.	DATE	APPD.

QTY	K-START NO. AND REVISION	AGC PROGRAM	TITLE	EFF
2	F10L2100-K10534-00	LUMINARY 210	RCS CWEA-3	LM-10

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS + – – –
DECIMALS + – – –
ANGLES + – – –
DO NOT SCALE THIS DRAWING

MATERIAL SEE NOTE 2

APPROVAL

AC ELECTRONICS DIVISION
GENERAL MOTORS CORP. MILWAUKEE WIS.

DRAWN M. BALTMANIS DATE 30MAR71
CHECKED J. REPINSKI 1APR71
APPROVAL C. Korslin
CONTRACT NAS 9-10356
NASA APPROVAL N/A
CCB APPROVAL 4/15/71

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

K-START TAPE
ASSEMBLY—
RCS CWEA-3

SIZE B
CODE IDENT NO. 99974
1026778
SCALE ——
SHEET 1 OF 1

MIL 10778 D 11 16 64

1026779

REVISIONS	TDRR 38405			
SYM	DESCRIPTION	CHG NO.	DATE	APPD.

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327.
2. MATERIAL: MYLAR TAPE 1.000 ±.003 WIDE BY 3.5 ±.3 MILS THICK.

QTY	K-START NO. AND REVISION	AGC PROGRAM	TITLE	EFF
2	F10L2100-K10535-00	LUMINARY 210	LM FDAI TOT-ATT/ATT-ERR	LM-1C

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON

FRACTIONS	DECIMALS	ANGLES
+ —	+ —	+ —
— —	— —	— —

DO NOT SCALE THIS DRAWING

MATERIAL SEE NOTE 2

APPROVAL

AC ELECTRONICS DIVISION
GENERAL MOTORS CORP. MILWAUKEE WIS.

DRAWN M. BALTMANIS DATE 30 MAR 71
CHECKED J. REPINSKI 1 APR 71
APPROVAL
CONTRACT NAS 9-10356
NASA APPROVAL N/A
CCB ~~MIT~~ APPROVAL E N Arnt 4/15/71

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

K-START TAPE
ASSEMBLY-
LM FDAI TOT-ATT/ATT-ERR

SIZE	CODE IDENT NO.	
B	99974	1026779

SCALE —— SHEET 1 OF 1

MIL 1077B-D 11-16-64

1026780

REVISIONS TDRR 38405				
SYM	DESCRIPTION	CHG NO.	DATE	APPD.

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327.

2. MATERIAL: MYLAR TAPE 1.000 ±.003 WIDE BY 3.5 ±.3 MILS THICK.

QTY	K-START NO. AND REVISION	AGC PROGRAM	TITLE	EFF
2	F10L2100-K10536-00	LUMINARY 210	FWD LAT/ALT-ALT RATE	LM-10

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON

FRACTIONS	DECIMALS	ANGLES
+ —	+ —	+ —
— —	— —	— —

DO NOT SCALE THIS DRAWING

MATERIAL
SEE NOTE 2

APPROVAL

AC ELECTRONICS DIVISION
GENERAL MOTORS CORP. MILWAUKEE WIS.

DRAWN M. BALTMANIS DATE 30MAR71
CHECKED J. REPINSKI 1APR71
APPROVAL O. Rowlin
CONTRACT NAS 9-10356
NASA APPROVAL N/A
CCB ~~MIT~~ APPROVAL E N Aust 4/15/71

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

K-START TAPE
ASSEMBLY—
FWD LAT/ALT-ALT RATE

SIZE	CODE IDENT NO.	
B	99974	1026780

SCALE ——
SHEET 1 OF 1

MIL 1077B D 11 16 64

1829201

REVISIONS TDRR 38405				
SYM	DESCRIPTION	CHG NO.	DATE	APPD.

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327.

2. MATERIAL: MYLAR TAPE 1.000 ±.003 WIDE BY 3.5 ±.3 MILS THICK.

QTY	K-START NO. AND REVISION	AGC PROGRAM	TITLE	EFF
2	F10L2100-K10538-00	LUMINARY 210	LGC SELF TEST	LM-10

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON

FRACTIONS	DECIMALS	ANGLES
+ —	+ —	+ —
— —	— —	— —

DO NOT SCALE THIS DRAWING

MATERIAL SEE NOTE 2

APPROVAL

AC ELECTRONICS DIVISION
GENERAL MOTORS CORP. MILWAUKEE WIS.

DRAWN M. BALTMANIS DATE 30MAR71
CHECKED J. REPINSKI 1APR71
APPROVAL
CONTRACT NAS 9-10356

NASA APPROVAL N/A
CCB ~~MIT~~ APPROVAL 4/15/71

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

K-START TAPE ASSEMBLY-
LGC SELF TEST

SIZE B
CODE IDENT NO. 99974
1026781

SCALE —
SHEET 1 OF 1

MIL 1077B D 11-16-64

1026782

REVISIONS TDRR 38405

SYM	DESCRIPTION	CHG NO.	DATE	APPD.

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327.
2. MATERIAL: MYLAR TAPE 1.000 ± .003 WIDE BY 3.5 ± .3 MILS THICK.

QTY	K-START NO. AND REVISION	AGC PROGRAM	TITLE	EFF
2	F10L2100-K10546-00	LUMINARY 210	LR DATA ACCURACY READ TEST	LM-10

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS + – – –
DECIMALS + – – –
ANGLES + – – –
DO NOT SCALE THIS DRAWING
MATERIAL SEE NOTE 2
APPROVAL

AC ELECTRONICS DIVISION
GENERAL MOTORS CORP. MILWAUKEE WIS.
DRAWN M. BALTMANIS DATE 30 MAR 71
CHECKED J. REPINSKI 1 APR 71
APPROVAL
CONTRACT NAS 9-10356
NASA APPROVAL N/A
CCB ~~SMT~~ APPROVAL 4/15/71

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

K-START TAPE
ASSEMBLY-
LR DATA ACCURACY READ TEST

SIZE B
CODE IDENT NO. 99974
1026782
SCALE ——
SHEET 1 OF 1

MIL 10778 D 11 16 64

1026783 | A

REVISIONS	TDRR 38405			
SYM	DESCRIPTION	CHG NO.	DATE	APPD.
A	REVISED PER TDRR 38418		26 MAY 71	JJJ V.M.

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327.
2. MATERIAL: MYLAR TAPE 1.000 ± .003 WIDE BY 3.5 ± .3 MILS THICK.

QTY	K-START NO. AND REVISION	AGC PROGRAM	TITLE	EFF
2	F10L2100-K10550-00	LUMINARY 210	ALMS & INT TEST/RSTRT MON	LM-10
2	F10L2100-K10550-1	LUMINARY 210	ALMS & INT TEST/RSTRT MON	LM-10

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± — DECIMALS ± — ANGLES ± —
DO NOT SCALE THIS DRAWING

MATERIAL SEE NOTE 2
APPROVAL

AC ELECTRONICS DIVISION
GENERAL MOTORS CORP. MILWAUKEE WIS.

DRAWN M. BALTMANIS DATE 30 MAR 71
CHECKED J. REPINSKI 1 APR 71
APPROVAL D. Kozel
CONTRACT NAS 9-10356
NASA APPROVAL N/A
CCB ~~MSC~~ APPROVAL E N Amel 7/15/71

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

K-START TAPE
ASSEMBLY-
ALMS & INT TEST/RSTRT MON

SIZE B
CODE IDENT NO. 99974
1026783
SCALE —
SHEET 1 OF 1

MIL 10778 D 11 16 64

1026783

REVISIONS TDRR 38405

SYM	DESCRIPTION	CHG NO.	DATE	APPD.

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327.
2. MATERIAL: MYLAR TAPE 1.000 ± .003 WIDE BY 3.5 ± .3 MILS THICK.

QTY	K-START NO. AND REVISION	AGC PROGRAM	TITLE	EFF
2	F10L2100-K10550-00	LUMINARY 210	ALMS & INT TEST/RSTRT MON	LM-10

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON

FRACTIONS	DECIMALS	ANGLES
+ —	+ —	+ —
— —	— —	— —

DO NOT SCALE THIS DRAWING

MATERIAL SEE NOTE 2

APPROVAL

AC ELECTRONICS DIVISION
GENERAL MOTORS CORP. MILWAUKEE WIS.

DRAWN M. BALTMANIS DATE 30 MAR 71
CHECKED U. REPINSKI 1 APR 71
APPROVAL D Korel
CONTRACT NAS 9-10356
NASA APPROVAL N/A
CCB ~~MIT~~ APPROVAL E N Ant 4/15/71

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

K-START TAPE
ASSEMBLY-
ALMS & INT TEST/RSTRT MON

SIZE B
CODE IDENT NO. 99974
1026783

SCALE ——
SHEET 1 OF 1

MIL 10778 D 11 16 64

1026784

REVISIONS TDRR 38405

SYM	DESCRIPTION	CHG NO.	DATE	APPD.

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327.
2. MATERIAL: MYLAR TAPE 1.000 ± .003 WIDE BY 3.5 ± .3 MILS THICK.

QTY	K-START NO. AND REVISION	AGC PROGRAM	TITLE	EFF
2	F10L2100-K10582-00	LUMINARY 210	AGS INITIALIZATION EARTH ORBIT	LM-10

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON

FRACTIONS	DECIMALS	ANGLES
+ −	+ −	+ −
− −	− −	− −

DO NOT SCALE THIS DRAWING

MATERIAL SEE NOTE 2

APPROVAL

AC ELECTRONICS DIVISION
GENERAL MOTORS CORP. MILWAUKEE WIS.

DRAWN M BALTMANIS DATE 30MAR71
CHECKED J. REPINSKI 1APR71
APPROVAL
CONTRACT NAS 9-10356

NASA APPROVAL N/A
CCB APPROVAL E N Aut 4/15/71

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

K-START TAPE
ASSEMBLY-
AGS INITIALIZATION EARTH ORBIT

SIZE	CODE IDENT NO.	
B	99974	1026784

SCALE —— SHEET 1 OF 1

MIL 10778 D 11 16 64

1026785

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327.
2. MATERIAL: MYLAR TAPE 1.000 ± .003 WIDE BY 3.5 ± .3 MILS THICK.

REVISIONS TDRR 38405

SYM	DESCRIPTION	CHG NO.	DATE	APPD.

QTY	K-START NO. AND REVISION	AGC PROGRAM	TITLE	EFF
2	F10L2100-K10583-00	LUMINARY 210	IRIG SCALE FACTOR TEST	LM-10

NEXT ASSY	USED ON

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS + − − −
DECIMALS + − − −
ANGLES + − − −
DO NOT SCALE THIS DRAWING

MATERIAL SEE NOTE 2

APPROVAL

AC ELECTRONICS DIVISION
GENERAL MOTORS CORP. MILWAUKEE WIS.

DRAWN M. BALTMANIS DATE 30 MAR 71
CHECKED J. REPINSKI 1 APR 71
APPROVAL
CONTRACT NAS 9-10356
NASA APPROVAL N/A
CCB ~~MIT~~ APPROVAL 4/15/71

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

K-START TAPE
ASSEMBLY-
IRIG SCALE FACTOR TEST

SIZE B
CODE IDENT NO. 99974
1026785

SCALE —
SHEET 1 OF 1

MIL 1077B D 11 16 64

1026786

REVISIONS TDRR 38405

SYM	DESCRIPTION	CHG NO.	DATE	APPD.

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327.

2. MATERIAL: MYLAR TAPE 1.000 ±.003 WIDE BY 3.5±.3 MILS THICK.

QTY	K-START NO. AND REVISION	AGC PROGRAM	TITLE	EFF
2	F10L2100-K10584-00	LUMINARY210	IMU/ASA MECHANICAL ALIGNMENT	LM-10

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS + − − − DECIMALS + − − − ANGLES + − − −
DO NOT SCALE THIS DRAWING

MATERIAL SEE NOTE 2
APPROVAL

AC ELECTRONICS DIVISION
GENERAL MOTORS CORP. MILWAUKEE WIS.

DRAWN M.BALTMANIS DATE 30MAR71
CHECKED J.REPINSKI 1APR71
APPROVAL C Korsh
CONTRACT NAS 9-10356
NASA APPROVAL N/A
CCB ~~MIT~~ APPROVAL E N Aust 4/15/71

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

K-START TAPE
ASSEMBLY-
IMU/ASA MECHANICAL ALIGNMENT

SIZE	CODE IDENT NO.	
B	99974	1026786

SCALE — SHEET 1 OF 1

MIL 1077B D 11 16 64

1026787

REVISIONS	TDRR 38405			
SYM	DESCRIPTION	CHG NO.	DATE	APPD.

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327.

2. MATERIAL: MYLAR TAPE 1.000 ±.003 WIDE BY 3.5 ±.3 MILS THICK.

QTY	K-START NO. AND REVISION	AGC PROGRAM	TITLE	EFF
2	F10L2100-K10585-00	LUMINARY 210	RCS/DAP POLARITY TEST	LM-10

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON

FRACTIONS	DECIMALS	ANGLES
+ –	+ –	+ –

DO NOT SCALE THIS DRAWING

MATERIAL
SEE NOTE 2

APPROVAL

AC ELECTRONICS DIVISION
GENERAL MOTORS CORP. MILWAUKEE WIS.

DRAWN M. BALTMANIS DATE 30 MAR 71
CHECKED J. REPINSKI 1 APR 71
APPROVAL O Koralen
CONTRACT NAS 9-10356

NASA APPROVAL N/A

CCB ~~MIT~~ APPROVAL E N Aunt 4/15/71

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

K-START TAPE
ASSEMBLY-
RCS/DAP POLARITY TEST

SIZE	CODE IDENT NO.	
B	99974	1026787

SCALE —— SHEET 1 OF 1

MIL 10778-D 11 16 64

1026768 A

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327.

2. MATERIAL: MYLAR TAPE 1.000 ±.003 WIDE BY 3.5 ±.3 MILS THICK.

REVISIONS TDRR 38404

SYM	DESCRIPTION		DATE	APPD.
A	REVISED PER TDRR 38536	CHG NO.	10 JAN 72	DKD

QTY	K-START NO. AND REVISION	AGC PROGRAM	TITLE	EFF
2	F12C0720-K10583-00	ARTEMIS-72	IRIG SCALE FACTOR TEST	CM-112
2	F12C0720-K10583-1	ARTEMIS-72	IRIG SCALE FACTOR TEST	CM-113 & SUBS

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON

FRACTIONS	DECIMALS	ANGLES
+ −	+ −	+ −
− −	− −	− −

DO NOT SCALE THIS DRAWING

MATERIAL SEE NOTE 2

APPROVAL

DELCO ELECTRONICS DIV
GENERAL MOTORS CORP. MILWAUKEE WIS.

DRAWN J. WOLSKI DATE 11 MAR 71
CHECKED [illegible] 12 MAR 71
APPROVAL E. Ko[illegible]
CONTRACT NAS 9-10356

NASA APPROVAL N/A
CCB APPROVAL E N Justin 4/15/71

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

K-START TAPE
ASSEMBLY-
IRIG SCALE FACTOR TEST

SIZE	CODE IDENT NO.	
B	99974	1026768

SCALE —— SHEET 1 OF 1

1026788

SYM	REVISIONS TORR 38405 DESCRIPTION	CHG NO.	DATE	APPD.

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327.
2. MATERIAL: MYLAR TAPE 1.000 ± .003 WIDE BY 3.5 ± .3 MILS THICK.

QTY	K-START NO. AND REVISION	AGC PROGRAM	TITLE	EFF
2	F10L2100- K10551-00	LUMINARY 210	RR CHAN 33 RADMODES MONITOR	LM- 10

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS + — — — DECIMALS + — — — ANGLES + — — —
DO NOT SCALE THIS DRAWING
MATERIAL SEE NOTE 2
APPROVAL

AC ELECTRONICS DIVISION
GENERAL MOTORS CORP. MILWAUKEE WIS.
DRAWN RB DATE 5 APR 71
CHECKED G. Kuhn
APPROVAL O Koslin
CONTRACT NAS 9-10356
NASA APPROVAL N/A
~~MIT~~ CCB APPROVAL E N Austin 4/15/71

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

K-START TAPE
ASSEMBLY,
RR CHAN 33 RADMODES MONITOR

SIZE B
CODE IDENT NO. 99974
1026788
SCALE —
SHEET 1 OF 1

MIL 10778 D 11 16 64

REVISIONS TDRR 38767				
SYM	DESCRIPTION	CHG NO.	DATE	APPD.

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327.
2. MATERIAL: MYLAR TAPE 1.000 ± .003 WIDE BY 3.5 ± .3 MILS THICK.

QTY	K-START NO. AND REVISION	AGC PROGRAM	TITLE	EFF
2	F12C0720-K10542-0	ARTEMIS 72	G & N TVC ALT TEST	CM113

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON

FRACTIONS	DECIMALS	ANGLES
+ −	+ −	+ −
− −	− −	− −

DO NOT SCALE THIS DRAWING

MATERIAL SEE NOTE 2

APPROVAL

AC ELECTRONICS DIVISION
GENERAL MOTORS CORP. MILWAUKEE WIS.

DRAWN J.C. DYE DATE 21 SEP 71
CHECKED 22 SEP 71
APPROVAL R Lennon 23 SEP 71
CONTRACT NAS 9-10356
NASA APPROVAL N/A
CCB APPROVAL E N Aust 9/25/71

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

K-START TAPE
ASSEMBLY
G & N TVC ALT TEST

SIZE	CODE IDENT NO.	
B	99974	1026789

SCALE ——
SHEET 1 OF 1

MIL 1077B D 11 16 64

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPROVED
	A	INITIAL RELEASE CLASS A PER TDRR 28555	30 MAR 66	

REQUIREMENTS:
ALL UNITS SHALL MEET THE REQUIREMENTS OF THE LATEST REVISION OF FEDERAL SPECIFICATION RR-C-271 ATTACHMENT TYPE VI RING.

DASH NO.	MATERIAL DIA.	INNER DIA.	WEIGHT PER 100 RINGS (LB) ±4%	PROOF LOAD (POUNDS)	FINISH
-004	3/16	2	5.75	100	ZINC COATED

THE PART NUMBER IS THE DRAWING NUMBER PLUS THE APPLICABLE DASH NUMBER.

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTION ± 1/32
3 PLACE DECIMALS ± —
ANGLES ± —
DO NOT SCALE THIS DRAWING
MATERIAL
APPROVAL

AC ELECTRONICS DIVISION
GENERAL MOTORS CORP. MILWAUKEE WIS.
DRAWN G. Dobbert DATE 24 JAN. 66
CHECKED 31 JAN 66
APPROVAL 5/2/66
CONTRACT
NASA APPROVAL A. C. METZGER
MIT APPROVAL 4 May 66

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

RING, CONNECTING, ROUND -
TYPE VI

NASA IDENTIFICATION LIST

SIZE
CODE IDENT NO. 99974
1896921
SCALE —
SHEET 1 OF 1

MIL-1008C D

REQUIREMENTS:

UNITS SHALL MEET ALL REQUIREMENTS OF MIL-R-18546/1

DASH NO.	MILITARY DESIGNATION	DASH NO.	MILITARY DESIGNATION	DASH NO.	MILITARY DESIGNATION	DASH NO.	MILITARY DESIGNATION	DASH NO.	MILITARY DESIGNATION
097	RE75G1R00	157	RE75G4R22	217	RE75G17R8	265	RE75G56R2	313	RE75G1780
098	02	158	32	218	18R2	266	57R6	314	1820
099	05	159	42	219	18R7	267	59R0	315	1870
100	07	160	53	220	19R1	268	60R4	316	1910
101	10	161	64	221	19R6	269	61R9	317	1960
102	13	162	75	222	20R0	270	63R4	318	2000
103	15	163	87	223	20R5	271	64R9	319	2050
104	18	164	99	224	21R0	272	66R5	320	2100
105	21	165	5R11	225	21R5	273	68R1	321	2150
106	24	166	23	226	22R1	274	69R8	322	2210
107	27	167	36	227	22R6	275	71R5	323	2260
108	30	168	49	228	23R2	276	73R2	324	2320
109	33	169	62	229	23R7	277	75R0	325	2370
110	37	170	76	230	24R3	278	76R8	326	2430
111	40	171	90	231	24R9	279	78R7	327	2490
112	43	172	6R04	232	25R5	280	80R6	328	2550
113	47	173	19	233	26R1	281	82R5	329	2610
114	50	174	34	234	26R7	282	84R5	330	2670
115	54	175	49	235	27R4	283	86R6	331	2740
116	58	176	65	236	28R0	284	88R7	332	2800
117	62	177	81	237	28R7	285	90R9	333	2870
118	65	178	98	238	29R4	286	93R1	334	2940
119	69	179	7R15	239	30R1	287	95R3	335	3010
120	74	180	32	240	30R9	288	97R6	336	3090
121	78	181	50	241	31R6	289	1000	337	3160
122	82	182	68	242	32R4	290	1020	338	3240
123	87	183	87	243	33R2	291	1050	339	3320
124	91	184	8R06	244	34R0	292	1070	340	3400
125	96	185	25	245	34R8	293	1100	341	3480
126	2R00	186	45	246	35R7	294	1130	342	3570
127	05	187	66	247	36R5	295	1150	343	3650
128	10	188	87	248	37R4	296	1180	344	3740
129	15	189	9R09	249	38R3	297	1210	345	3830
130	21	190	31	250	39R2	298	1240	346	3920
131	26	191	53	251	40R2	299	1270	347	4020
132	32	192	76	252	41R2	300	1300	348	4120
133	37	193	10R0	253	42R2	301	1330	349	4220
134	43	194	10R2	254	43R2	302	1370	350	4320
135	49	195	10R5	255	44R2	303	1400	351	4420
136	55	196	10R7	256	45R3	304	1430	352	4530
137	61	197	11R0	257	46R4	305	1470	353	4640
138	67	198	11R3	258	47R5	306	1500	354	4750
139	74	199	11R5	259	48R7	307	1540	355	4870
140	80	200	11R8	260	49R9	308	1580	356	4990
141	87	201	12R1	261	51R1	309	1620	357	5110
142	94	202	12R4	262	52R3	310	1650	358	5230
143	3R01	203	12R7	263	53R6	311	1690	359	5360
144	09	204	13R0	264	54R9	312	1740	360	5490
145	16	205	13R3						
146	24	206	13R7						
147	32	207	14R0						
148	40	208	14R3						
149	48	209	14R7						
150	57	210	15R0						
151	65	211	15R4						
152	74	212	15R8						
153	83	213	16R2						
154	92	214	16R5						
155	4R02	215	16R9						
156	12	216	17R4						

REVISIONS

SYM	ZONE	DESCRIPTION	CHG NO	DATE	APPD.
A	—	REPLACED WITH CHANGE BY REV B PER MXC 189482. REVISED PER TDRR 03740		4-SEP-63	

FOR INFORMATION ONLY

CLASS B RELEASE TDR No. 02137 **DATE** 7/24/63

A	A
SHEET 1	SHEET 2
REVISION STATUS OF SHEETS	

THE PART NUMBER IS THIS DRAWING NUMBER PLUS THE APPLICABLE DASH NUMBER

Ⓐ REPLACED WITH CHANGE BY REV B

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS DECIMALS ANGLES
DO NOT SCALE THIS DRAWING
MATERIAL
CONTRACT NAS 9-497

AC SPARK PLUG DIVISION, GMC
MILWAUKEE, WISCONSIN
ACSP PN
DRAWN L. Patterson DATE 12 JUNE 63
CHECKED M. MANNING 12 JUN 63
APPROVAL L. Gedeman 7/23/63
APPROVAL D. L. Fox 14 JUN 63
NASA APPROVAL 7/24/63
MIT APPROVAL 24 July 63

MANNED SPACECRAFT CENTER
HOUSTON TEXAS

RESISTOR, FIXED, WIREWOUND POWER STYLE RE75 ± 1% TOL.

NASA IDENTIFICATION LIST

CODE IDENT NO
SIZE C
1896982
SCALE NONE
SHEET 1 OF 2

MIL 1077C—P

INCHES
0 1 2
PHOTOGRAPHIC SCALE ONLY

SYM	ZONE	DESCRIPTION	CHG NO	DATE	APPD.
A		REPLACED WITH CHANGE BY REV B PER MXC 189482 REVISED PER TDRR 03740	800863	4-SEP-63	

DASH NO.	MILITARY DESIGNATION	DASH NO.	MILITARY DESIGNATION	DASH NO.	MILITARY DESIGNATION	DASH NO.	MILITARY DESIGNATION
361	RE75G5620	421	RE75G2371	481	RE75G1002	529	RE75G3162
362	5760	422	2431	482	1022	530	3242
363	5900	423	2491	483	1052	531	3322
364	6040	424	2551	484	1072	532	3402
365	6190	425	2611	485	1102	533	3482
366	6340	426	2671	486	1132	534	3572
367	6490	427	2741	487	1152	535	3652
368	6650	428	2801	488	1182	536	3742
369	6810	429	2871	489	1212	537	3832
370	6980	430	2941	490	1242	538	3922
371	7150	431	3011	491	1272		
372	7320	432	3091	492	1302		
373	7500	433	3161	493	1332		
374	7680	434	3241	494	1372		
375	7870	435	3321	495	1402		
376	8060	436	3401	496	1432		
377	8250	437	3481	497	1472		
378	8450	438	3571	498	1502		
379	8660	439	3651	499	1542		
380	8870	440	3741	500	1582		
381	9090	441	3831	501	1622		
382	9310	442	3821	502	1652		
383	9530	443	4021	503	1692		
384	9760	444	4121	504	1742		
385	1001	445	4221	505	1782		
386	1021	446	4321	506	1822		
387	1051	447	4421	507	1872		
388	1071	448	4531	508	1912		
389	1101	449	4641	509	1962		
390	1131	450	4751	510	2002		
391	1151	451	4871	511	2052		
392	1181	452	4991	512	2102		
393	1211	453	5111	513	2152		
394	1241	454	5231	514	2212		
395	1271	455	5361	515	2262		
396	1301	456	5491	516	2322		
397	1331	457	5621	517	2372		
398	1371	458	5761	518	2432		
399	1401	459	5901	519	2492		
400	1431	460	6041	520	2552		
401	1471	461	6191	521	2612		
402	1501	462	6341	522	2672		
403	1541	463	6491	523	2742		
404	1581	464	6651	524	2802		
405	1621	465	6811	525	2872		
406	1651	466	6981	526	2942		
407	1691	467	7151	527	3012		
408	1741	468	7321	528	3092		
409	1781	469	7501				
410	1821	470	7681				
411	1871	471	7871				
412	1911	472	8061				
413	1961	473	8251				
414	2001	474	8451				
415	2051	475	8661				
416	2101	476	8871				
417	2151	477	9091				
418	2211	478	9311				
419	2261	479	9531				
420	2321	480	9761				

FOR INFORMATION ONLY

CLASS B RELEASE TDR No. 02137 **DATE** 7/24/63

REPLACED WITH CHANGE BY REV B

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS + — − — DECIMALS + — − — ANGLES + — − —
DO NOT SCALE THIS DRAWING
MATERIAL
CONTRACT NAS 9-497

AC SPARK PLUG DIVISION, GMC
MILWAUKEE, WISCONSIN
ACSP PN
DRAWN G. Petterson DATE 12 JUNE 63
CHECKED M. Manning 12 JUNE 63
APPROVAL L. Fedimon 7/23/63
APPROVAL D. L. Post 14 JUN 63
NASA APPROVAL 7/24/63
MIT APPROVAL W Kupfer 24 Jul 63

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

RESISTOR, FIXED, WIREWOUND POWER
STYLE RE75 ± 1% TOL.

NASA IDENTIFICATION LIST

CODE IDENT NO
SIZE C
1896982
SCALE NONE
SHEET 2 OF 2

MIL 1077C--P

INCHES
0 1 2
PHOTOGRAPHIC SCALE ONLY

REVISIONS					
SYM	ZONE	DESCRIPTION	CHG NO.	DATE	APPD.

REQUIREMENTS:

UNITS SHALL MEET ALL REQUIREMENTS OF MIL-R-11/8.

DASH NO.	MILITARY DESIGNATION	DASH NO.	MILITARY DESIGNATION	DASH NO.	MILITARY DESIGNATION	DASH NO.	MILITARY DESIGNATION	DASH NO.	MILITARY DESIGNATION
001	RC07GF100J	059	RC07GF272J	117	RC07GF684J				
002	110J	060	302J	118	754J				
003	120J	061	332J	119	824J				
004	130J	062	362J	120	914J				
005	150J	063	392J	121	105J				
006	160J	064	432J	122	115J				
007	180J	065	472J	123	125J				
008	200J	066	512J	124	135J				
009	220J	067	562J	125	155J				
010	240J	068	622J	126	165J				
011	270J	069	682J	127	185J				
012	300J	070	752J	128	205J				
013	330J	071	822J	129	225J				
014	360J	072	912J	130	245J				
015	390J	073	103J	131	275J				
016	430J	074	113J	132	305J				
017	470J	075	123J	133	335J				
018	510J	076	133J	134	365J				
019	560J	077	153J	135	395J				
020	620J	078	163J	136	435J				
021	680J	079	183J	137	475J				
022	750J	080	203J	138	515J				
023	820J	081	223J	139	565J				
024	910J	082	243J	140	625J				
025	101J	083	273J	141	685J				
026	111J	084	303J	142	755J				
027	121J	085	333J	143	825J				
028	131J	086	363J	144	915J				
029	151J	087	393J	145	106J				
030	161J	088	433J	146	116J				
031	181J	089	473J	147	126J				
032	201J	090	513J	148	136J				
033	221J	091	563J	149	156J				
034	241J	092	623J	150	166J				
035	271J	093	683J	151	186J				
036	301J	094	753J	152	206J				
037	331J	095	823J	153	226J				
038	361J	096	913J						
039	391J	097	104J						
040	431J	098	114J						
041	471J	099	124J						
042	511J	100	134J						
043	561J	101	154J						
044	621J	102	164J						
045	681J	103	184J						
046	751J	104	204J						
047	821J	105	224J						
048	911J	106	244J						
049	102J	107	274J						
050	112J	108	304J						
051	122J	109	334J						
052	132J	110	364J						
053	152J	111	394J						
054	162J	112	434J						
055	182J	113	474J						
056	202J	114	514J						
057	222J	115	564J						
058	242J	116	624J						

FOR INFORMATION ONLY

CLASS B RELEASE TDR No. 02827 **DATE** 8/28/63

THE PART NUMBER IS THIS DRAWING NUMBER PLUS THE APPLICABLE DASH NUMBER.

MASTER

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS + − DECIMALS + − ANGLES + −
DO NOT SCALE THIS DRAWING
MATERIAL
CONTRACT NAS9-497

AC SPARK PLUG DIVISION, GMC
MILWAUKEE, WISCONSIN
ACSP PN
DRAWN R.W. Turner DATE [illegible]
CHECKED WILSON 11 JULY 63
APPROVAL F Pastorino 11 July 63
APPROVAL 8/20/63
NASA APPROVAL 8/24/63
MIT APPROVAL 8/23/63

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

RESISTOR, FIXED, COMPOSITION
STYLE RC07 ± 5% TOL

NASA IDENTIFICATION LIST

CODE IDENT NO. | SIZE C | 1896985
SCALE | SHEET 1 of 1

MIL 1077C-P

INCHES
0 1 2
PHOTOGRAPHIC SCALE ONLY

REVISIONS

SYM	ZONE	DESCRIPTION	CHG NO.	DATE	APPD.
A		CHANGE IN ACCORDANCE WITH MXC 191866 PER TDRR 7730		7 Nov 63	WSM
B		CHANGE IN ACCORDANCE WITH CM 193738 PER TDRR 7731		9 JAN 64	WEC
C		CHANGE IN ACCORDANCE WITH CM 194749 PER TDRR 7732		30-JAN-64	R.T.
D		REVISED & UPGRADED TO CLASS A PER TDRR 15977		9 FEB 65	EF W.D.

REQUIREMENTS:
UNITS SHALL MEET THE REQUIREMENTS OF THE LATEST REVISION OF MS20257.

DASH NO.	MILITARY DESIGNATION	DASH NO.	MILITARY DESIGNATION	DASH NO	MILITARY DESIGNATION
001	MS20257-2-1300	204	MS20257C2-400	101	MS 20257P2-100
002	MS20257-2-100			108	MS 20257P2-850
003	MS20257-2-850				
004	MS20257-2-200				

NOTE:
DASH NUMBERS BEGINNING WITH 0 ARE UNANODIZED ALUMINUM ALLOY.

DASH NUMBERS BEGINNING WITH 2 ARE CORROSION RESISTANT STEEL.

DASH NUMBERS BEGINNING WITH 1 ARE ANODIZED ALUMINUM ALLOY.

THE PART NUMBER IS THE DRAWING NUMBER PLUS THE APPLICABLE DASH NUMBER.

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS DECIMALS ANGLES
± ± ±
DO NOT SCALE THIS DRAWING
MATERIAL
CONTRACT NAS 9-497

AC SPARK PLUG DIVISION, GMC
MILWAUKEE, WISCONSIN
ACSP PN
DRAWN D.L. Jacobs DATE 14 AUG 63
CHECKED 19 AUG 63
APPROVAL 19 Aug 63
APPROVAL 9/4/63
NASA APPROVAL 9/5/63
MIT APPROVAL 5 Sep 63

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

HINGE, CONTINUOUS
MS20257

NASA IDENTIFICATION LIST

CODE IDENT NO.
SIZE C
1897062
SCALE NONE
SHEET 1 OF 1

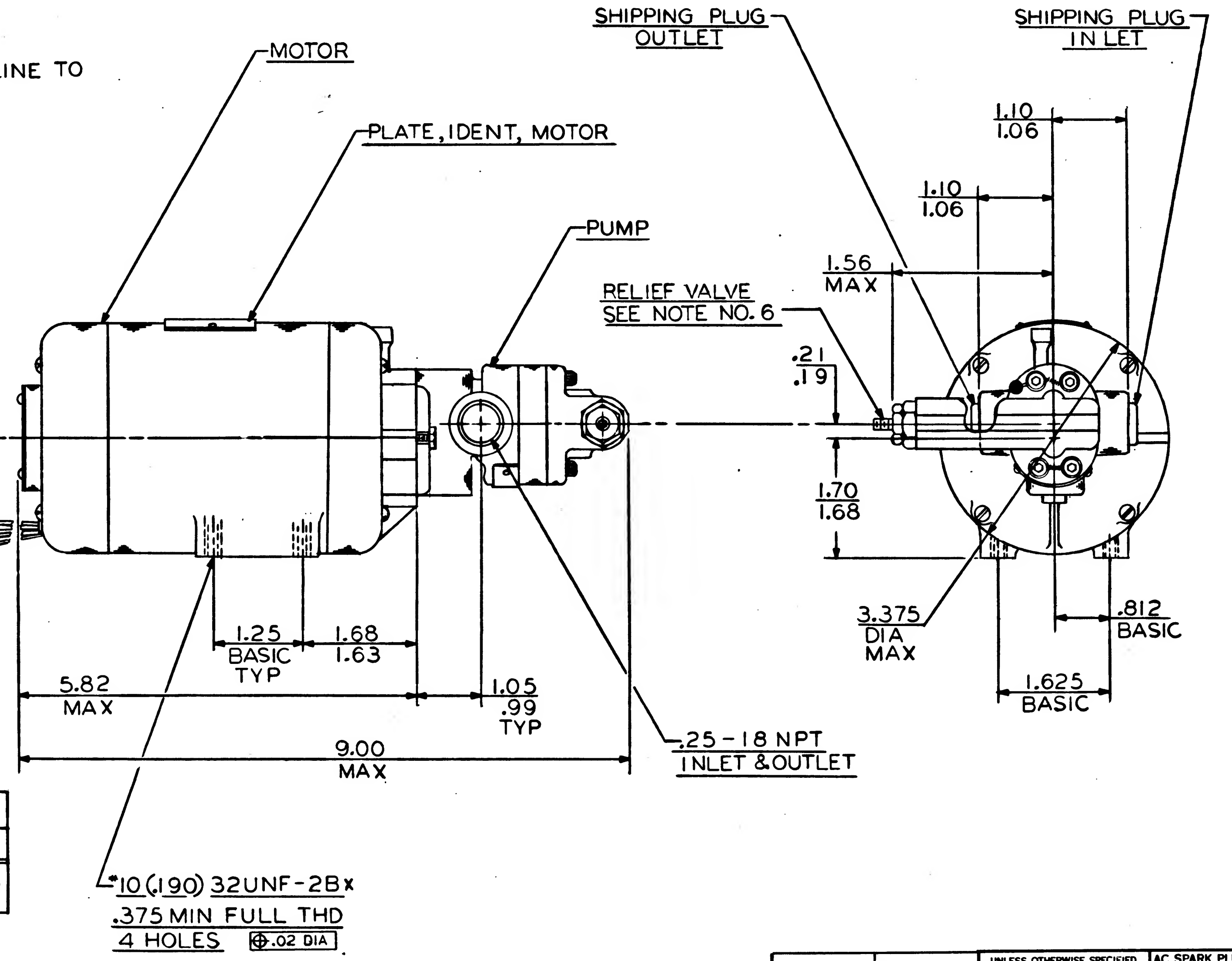
1897150

REVISIONS TORR 13851

SYM	ZONE	DESCRIPTION	CHG NO.	DATE	APPD.

NOTES

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. PUMP REQUIREMENTS:
   - A FLUID PUMPED:
     - a 62.5 PARTS BY WT OF ETHYLENE GLYCOL (REF MIL-E-9500)
     - b 37.5 PARTS BY WT OF DISTILLED WATER
   - B FLUID TEMP: 95(+5°)(-5°)F
   - C FLOW RATE: 0.35 GPM
   - D OUTLET PRESS.: 75 PSIG MIN
   - E INLET PRESS.: SEA LEVEL
3. MOTOR REQUIREMENTS:
   - A VOLTAGE: 190 (+25) (-0) VOLTS, AC, LINE TO LINE, 3 PHASE, 60 CY
   - B DUTY: CONTINUOUS
   - C AMPS: .5 NOMINAL PER PHASE
4. ONLY THE ITEMS LISTED ON THIS DWG AND IDENTIFIED BY VENDORS NAME ADDRESS, AND PART NO. HAVE BEEN TESTED AND APPROVED BY EASTERN INDUSTRIES FOR USE IN COOLANT SUPPLY (1900098) A SUB ITEM SHALL NOT BE USED WITHOUT PRIOR TESTING AND APPROVAL BY EASTERN INDUSTRIES AND AC SPARK PLUG
5. IDENTIFY USING DRAWING NUMBER AND REVISION LETTER PER MIL-STD-130
6. RELIEF VALVE SET FOR FULL FLOW BYPASS PRESS. OF 60 PSI MAX.
7. PUMPS INSTALLED IN CIRCUITS 3 & 4 MUST BE FIELD ADJUSTED FOR A MAX BY-PASS PRESSURE OF 80 PSIG. (REFER TO TEST PROCEDURE PS 1900098, SECTION 4)



SOURCE OF SUPPLY	
VENDOR IDENT NO.	VENDOR
306090	EASTERN INDUSTRIES, HAMDEN, CONN.

SOURCE CONTROL DRAWING

NEXT ASSY	USED ON
1900098	1900098

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS + - DECIMALS + - ANGLES + -
DO NOT SCALE THIS DRAWING
MATERIAL
CONTRACT NAS 9-497

AC SPARK PLUG DIVISION, GMC
MILWAUKEE, WISCONSIN
ACSP PN
DRAWN W REDDING DATE 3/16/64
CHECKED G.D.D. 5-15-64
APPROVAL M.R. Goodale 4-8-64
APPROVAL L. Gedman 10/13/64
NASA APPROVAL 11-4-64
MIT APPROVAL

MANNED
SPACECRAFT CENTER
HOUSTON, TEXAS

PUMP, ROTARY, POWER DRIVEN

CODE IDENT NO. SIZE D 1897150
SCALE 1/1 SHEET

PROCURE ONLY FROM APPROVED SOURCES LISTED ON ND 1002034 FOR THIS DRAWING

NOTICE — WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS, OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

1897164

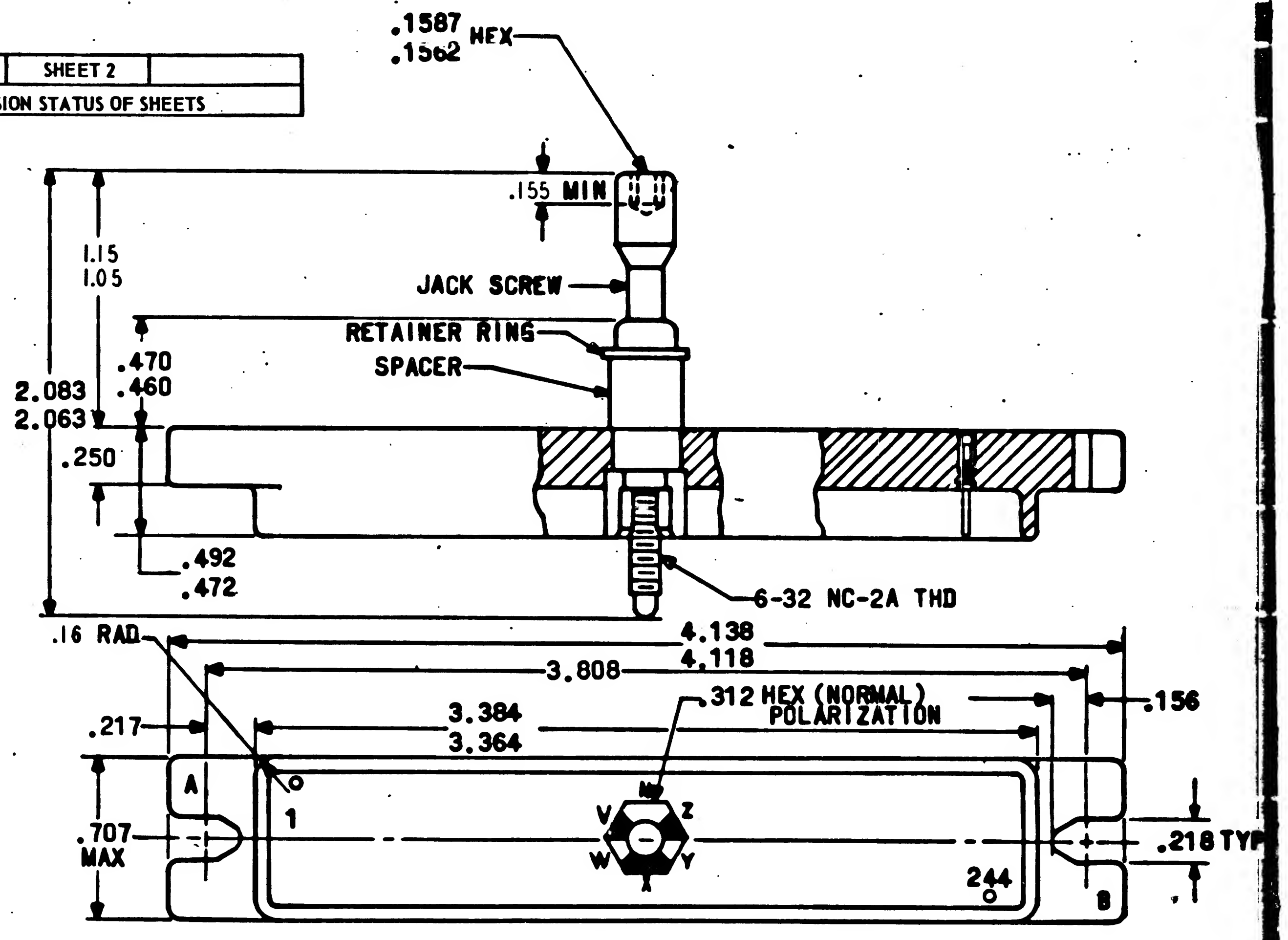
REVISIONS 14867			
SYM	DESCRIPTION	DATE	APPROVAL

REQUIREMENTS:

1. GENERAL:
   - A. INTERPRET DRAWINGS IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327.
   - B. SUPPLIER SHALL CONFORM TO THE QUALITY ASSURANCE PROVISIONS SPECIFIED IN ND 1015404, CLASS 2.
   - C. UNITS SHALL BE CAPABLE OF MEETING ALL QUALIFICATION REQUIREMENTS SPECIFIED IN ND 1002052.
   - D. CONNECTOR IS DESIGNED TO USE PIN CONTACTS PER 1010738

2. INSPECTION AND ACCEPTANCE:
   - A. ~~MECHANICAL REQUIREMENTS:~~
     - (1) MATERIAL:
       - (a) BODY: DIALLYLPHTHALATE PER MIL-M-14, TYPE SDG-F TAN COLOR
       - (b) HARDWARE:
         - POLARIZING BOSS: ALUMINUM ALLOY GRADE 7075T6 PER QQ-A-277-1.
         - JACKSCREW AND METAL INSERT: CORROSION RESISTANT STEEL, CLASS 303, OR 303 SE CONDITION A OR B PER MILITARY SPECIFICATION QQ-S-763.
         - SPACER: DIALLYLPHTHALATE PER MIL-M-14 TYPE SDG-F
         - RETAINING RING: MS-16632-28 PER MILITARY SPECIFICATION MIL-R-21248.
     - (2) FINISH:
       - (a) HARDWARE:
         - POLARIZING BOSS: GRAY ANODIZE PER SPECIFICATION MIL-A-8625, TYPE I.
         - JACKSCREW AND METAL INSERT: PASSIVATE PER MIL-F-14072 FINISH NO. E-300. JACKSCREW IS LUBRICATED.
     - (3) FOR POLARIZATION SEE TABLE I
     - (4) DIMENSIONS: AS PER DRAWING
     - (5) MARKING:
       - (a) PIECEMARKING: UNITS SHALL BE MARKED IN ACCORDANCE WITH ND 1002019 WITH THE MANUFACTURER'S NAME AND/OR SYMBOL, NASA PART NUMBER, AND REVISION LETTER, LOT OR SERIAL NUMBER TRACEABLE TO THE DATE OF MANUFACTURE. THE MANUFACTURER'S PART NUMBER MAY APPEAR ON THE PART.
       - (b) PACKAGE: INTERNAL INDIVIDUAL OR COLLECTIVE PACKAGES AND EXTERNAL PACKAGING SHALL BE MARKED WITH THE FOLLOWING INFORMATION:
         - SUPPLIER'S NAME
         - NASA PART NUMBER AND REVISION LETTER
         - SUPPLIER'S LOT OR SERIAL NUMBER
       - (c) MANUFACTURER'S PART NUMBER MAY APPEAR ON THE PACKAGE.

SHEET 1	SHEET 2	
REVISION STATUS OF SHEETS		



QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.
LIST OF MATERIALS			

PROCURE ONLY FROM APPROVED SOURCES LISTED ON ND 1002034 FOR THIS DRAWING.

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± — DECIMALS ±.010 ±.03 ANGLES ± —
DO NOT SCALE THIS DRAWING

MATERIAL
SEE REQUIREMENTS

HEAT TREATMENT
NONE

FINAL FINISH
NONE

MIT
INSTRUMENTATION LAB
CAMBRIDGE, MASS
DWG NO. Contract NAS 9-497

DRAWN Weisert DATE 30-OCT-64
CHECKED Ed Foster 30 OCT 64
APPROVAL Duncan Lewis 30 OCT 64
APPROVAL J. M. Watson 1 Dec 64
NASA APPROVAL 12/5
MIT APPROVAL 12/15/64

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

CONNECTOR, PLUG, ELECTRICAL
(244 NO. 22 PIN CONTACTS)

SPECIFICATION CONTROL DRAWING

CODE IDENT NO. | SIZE C | NASA DRAWING NO. 1897164
SCALE NONE | WT | SHEET 1 OF 2

INCHES
0 1 2
PHOTOGRAPHIC SCALE ONLY

1897164

REVISIONS 14867			
SYM	DESCRIPTION	DATE	APPROVAL

NOTICE — WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER, AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REQUIREMENTS: (CONTINUED)

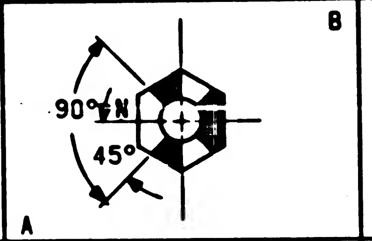
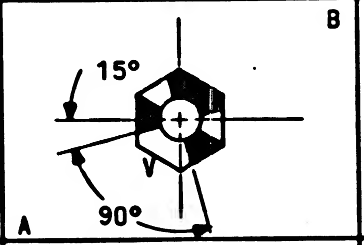
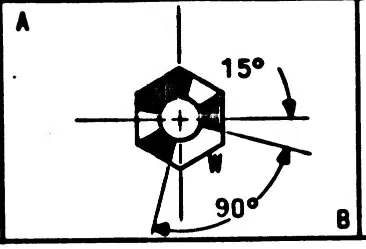
3. DESIGN REQUIREMENTS:
   - A. ELECTRICAL REQUIREMENTS WITH CONTACTS INSTALLED
     - (1) INSULATION RESISTANCE: 2000 MEGOHMS MINIMUM AT 150°F MEASURED BETWEEN ANY TWO ADJACENT CONTACTS AND BETWEEN THE SHELL OR HARDWARE AND ANY ADJACENT CONTACT WHEN TESTED IN ACCORDANCE WITH MIL-STD-202 METHOD 302, CONDITION C.
     - (2) DIELECTRIC STRENGTH: SEA LEVEL - NO EVIDENCE OF BREAKDOWN OR FLASHOVER WHEN TESTED AT 1500 VRMS. 90,000 TO 130,000 FT. - NO EVIDENCE OF BREAKDOWN OR FLASHOVER WHEN 100 VRMS APPLIED BETWEEN ANY PAIR OF CONTACTS AND BETWEEN THE HARDWARE AND ANY CONTACT WHEN TESTED IN ACCORDANCE WITH MIL-STD-202, METHOD 301.
     - (3) VOLTAGE RATINGS:

	VOLTS DC	VOLTS AC RMS
SEA LEVEL	490	350
10,000 FT.	390	280
60,000 FT.	140	100

WITHSTANDING VOLTAGE (SEA LEVEL) 1500 VOLTS RMS 60 CPS WITHOUT FLASHOVER.

   - B. MECHANICAL
     - (1) CONTACT RETENTION FORCE: WHEN CONTACTS ARE PROPERLY INSTALLED IN THEIR USING CONNECTOR, THEY ARE CAPABLE OF WITHSTANDING (WITHOUT DAMAGE) A MIN OF 15 LBS. AXIAL LOAD APPLIED IN EITHER DIRECTION AT A RATE OF 1 POUND PER SECOND.

NOTES:
1. MATES WITH 1010816

NASA DASH NUMBER	POLARIZING CHART	NO. OF CONTACTS
-144		244
-244		244
-344		244

THE PART NUMBER IS THE DRAWING NUMBER PLUS THE APPLICABLE DASH NUMBER.

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.
LIST OF MATERIALS			

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING
MATERIAL
HEAT TREATMENT
FINAL FINISH

MIT INSTRUMENTATION LAB
CAMBRIDGE, MASS
DWG NO. Contract NAS 9-497
DRAWN Hesiert DATE 30-OCT-64
CHECKED Ed Foster 30 OCT 64
APPROVAL Amesm Laud 30 OCT 64
APPROVAL J. M. Watson 1 Dec 64
NASA APPROVAL
MIT APPROVAL 12/1/64

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

CONNECTOR, PLUG, ELECTRICAL
(244 NO. 22 PIN CONTACTS)

SPECIFICATION CONTROL DRAWING

CODE IDENT NO. SIZE C NASA DRAWING NO. 1897164
SCALE WT SHEET 2 OF 2

INCHES
0 1 2
PHOTOGRAPHIC SCALE ONLY

NOTICE — WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER, AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

1897165

REVISIONS TDRR 14867

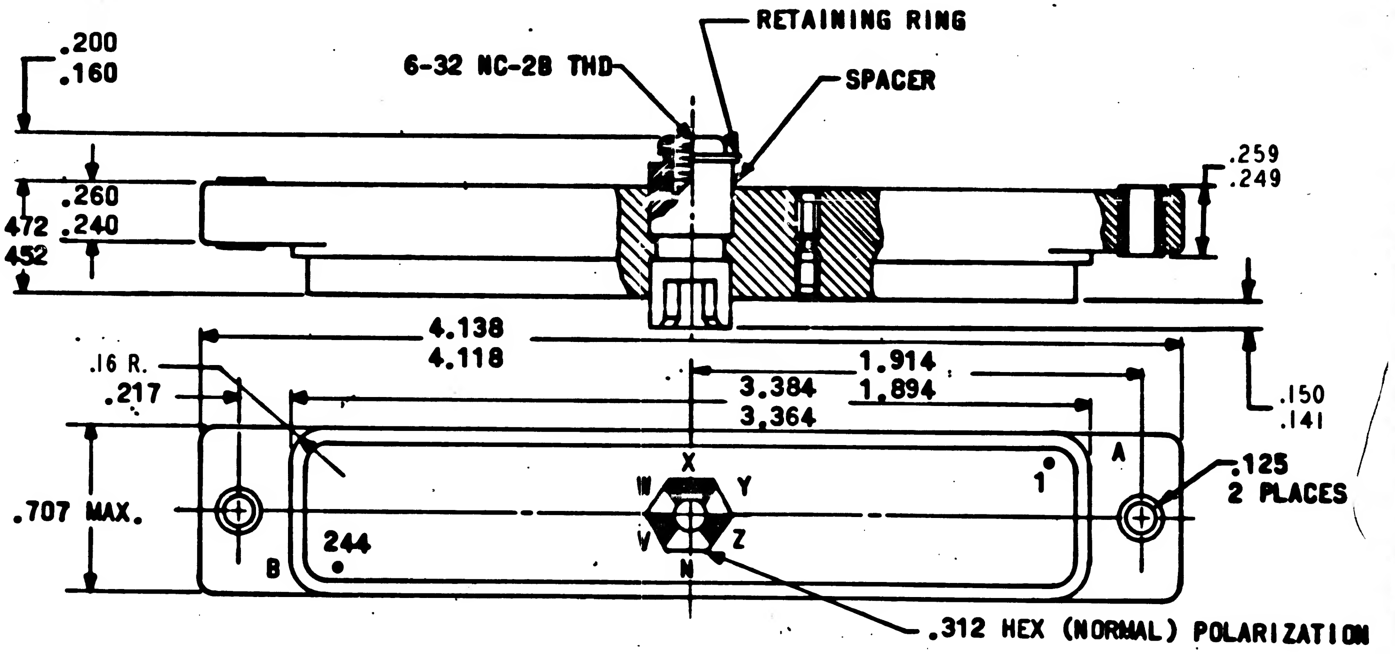
SYM	DESCRIPTION	DATE	APPROVAL

REQUIREMENTS:

1. **GENERAL:**
   - A. INTERPRET DRAWINGS IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327.
   - B. SUPPLIER SHALL CONFORM TO THE QUALITY ASSURANCE PROVISIONS SPECIFIED IN ND 1015404, CLASS 2.
   - C. UNITS SHALL BE CAPABLE OF MEETING ALL QUALIFICATION REQUIREMENTS SPECIFIED IN ND 1002052.
   - D. CONNECTOR IS DESIGNED TO UTILIZE SOCKET CONTACTS PER 1010738

2. **INSPECTION AND ACCEPTANCE:**
   - A. MECHANICAL REQUIREMENTS:
     - (1) MATERIAL:
       - (a) BODY: DIALLYLPHTHALATE PER MIL-M-14, TYPE SDG-F TAN COLOR.
       - (b) HARDWARE:
         - POLARIZING BOSS: ALUMINUM ALLOY GRADE 7075T6 PER QQ-A-277-1
         - METAL INSERT: CRES, CLASS 303 OR 303 SE COND A OR B PER QQ-S-763.
         - SPACER: DIALLYLPHTHALATE, PER MIL-M-14, TYPE SDG-F
         - RETAINING RING: MS-16632-28 PER MILITARY SPECIFICATION MIL-R-21248.
     - (2) FINISH:
       - (a) HARDWARE:
         - POLARIZING BOSS: GRAY ANODIZE PER SPECIFICATION MIL-A-8625 TYPE I.
         - METAL INSERT: PASSIVATE PER MIL-F-14072 FINISH NO. E-300.
     - (3) FOR POLARIZATION SEE TABLE I
     - (4) DIMENSIONS: AS PER DRAWING
     - (5) MARKING:
       - (a) PIECEMARKING: UNITS SHALL BE MARKED IN ACCORDANCE WITH ND 1002019 WITH THE MANUFACTURER'S NAME AND/OR SYMBOL, NASA PART NUMBER, AND REVISION LETTER, MANUFACTURER'S LOT OR SERIAL NUMBER TRACEABLE TO DATE OF MANUFACTURE. THE MANUFACTURER'S PART NUMBER MAY APPEAR ON THE PART.
       - (b) PACKAGE: INTERNAL INDIVIDUAL OR COLLECTIVE PACKAGES AND EXTERNAL PACKAGING SHALL BE MARKED WITH THE FOLLOWING INFORMATION:
         - SUPPLIER'S NAME
         - NASA PART NUMBER AND REVISION LETTER
         - SUPPLIER'S LOT OR SERIAL NUMBER
       - (c) MANUFACTURER'S PART NUMBER MAY APPEAR ON THE PACKAGE.

SHEET 1	SHEET 2	
REVISION STATUS OF SHEETS		



PROCURE ONLY FROM APPROVED SOURCES LISTED ON ND 1002034 FOR THIS DRAWING.

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± DECIMALS ±.010 ±.03 ANGLES ±
DO NOT SCALE THIS DRAWING
MATERIAL SEE REQUIREMENTS
HEAT TREATMENT NONE
FINAL FINISH NONE

MIT
INSTRUMENTATION LAB
CAMBRIDGE, MASS.
Contract NAS 9-497

DRAWN Hewitt DATE 30-OCT-64
CHECKED Ed Foster 30 OCT 64
APPROVAL 30OCT64
APPROVAL L M Watson 2/15/64
NASA APPROVAL
MIT APPROVAL 12/15/64

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

CONNECTOR, RECEPTACLE, ELECTRICAL
(244 NO. 22 SOCKET CONTACTS)

SPECIFICATION CONTROL DRAWING

CODE IDENT NO. | SIZE C | NASA DRAWING NO. 1897165
SCALE NONE | WT | SHEET 1 OF 2

INCHES
0 1 2
PHOTOGRAPHIC SCALE ONLY

NOTICE — WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

1897165

REVISIONS 14867			
SYM	DESCRIPTION	DATE	APPROVAL

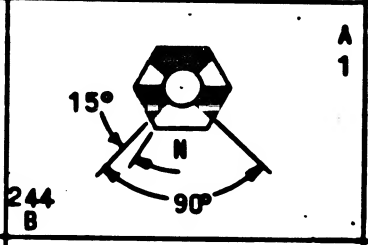
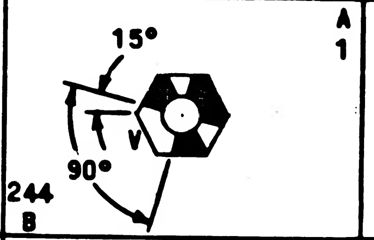
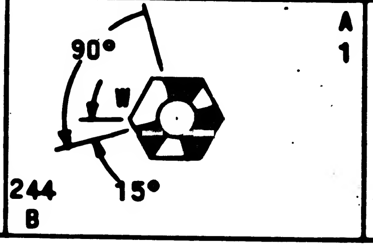
REQUIREMENTS: (CONTINUED)

3. DESIGN REQUIREMENTS:
   A. ELECTRICAL REQUIREMENTS WITH CONTACTS INSTALLED
      (1) INSULATION RESISTANCE: 2000 MEGOHMS MINIMUM AT 150°F MEASURED BETWEEN ANY TWO ADJACENT CONTACTS AND BETWEEN THE SHELL OR HARDWARE AND ANY ADJACENT CONTACT WHEN TESTED IN ACCORDANCE WITH MIL-STD-202 METHOD 302, CONDITION C.
      (2) DIELECTRIC STRENGTH: SEA LEVEL - NO EVIDENCE OF BREAKDOWN OR FLASHOVER WHEN TESTED AT 1500 VRMS. 90,000 TO 130,000 FT. - NO EVIDENCE OF BREAKDOWN OR FLASHOVER WHEN 100 VRMS APPLIED BETWEEN ANY PAIR OF CONTACTS AND BETWEEN THE HARDWARE AND ANY CONTACT WHEN TESTED IN ACCORDANCE WITH MIL-STD-202, METHOD 301.
      (3) VOLTAGE RATINGS:

	VOLTS DC	VOLTS AC RMS
SEA LEVEL	490	350
10,000 FT.	390	280
60,000 FT.	140	100

WITHSTANDING VOLTAGE (SEA LEVEL) 1500 VOLTS RMS 60 CPS WITHOUT FLASHOVER.

4. MECHANICAL:
   A. CONTACT RETENTION FORCE
      (1) WHEN CONTACTS ARE PROPERLY INSTALLED IN THEIR USING CONNECTOR, THEY ARE CAPABLE OF WITHSTANDING (WITHOUT DAMAGE) A MIN OF 15 LBS. AXIAL LOAD APPLIED IN EITHER DIRECTION AT A RATE OF 1 POUND PER SECOND.

NASA DASH NUMBER	POLARIZING POSITION	NO. OF CONTACT CAVITIES
-144		244
-244		244
-344		244

NOTES:
1. MATES WITH 1010815

THE PART NUMBER IS THE DRAWING NUMBER PLUS THE APPLICABLE DASH NUMBER.

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.
LIST OF MATERIALS			

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING
MATERIAL
HEAT TREATMENT
FINAL FINISH

MIT
INSTRUMENTATION LAB
CAMBRIDGE, MASS.
DWG NO Contract NAS 9-497
DRAWN Heissert DATE 30-OCT-64
CHECKED Ed Foster 30 OCT 64
APPROVAL 30 OCT 64
APPROVAL D. M. Watson 12/15/64
NASA APPROVAL 12/15
MIT APPROVAL 12/15/64

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

CONNECTOR, RECEPTACLE, ELECTRICAL
(244 NO. 22 SOCKET CONTACTS)

SPECIFICATION CONTROL DRAWING

CODE IDENT NO.
SIZE C
NASA DRAWING NO. 1897165
SCALE
WT
SHEET 2 OF 2

INCHES
0 1 2
PHOTOGRAPHIC SCALE ONLY

NOTICE — WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO

THE PART NUMBER IS THE DRAWING NUMBER PLUS THE APPLICABLE DASH NUMBER.

1897166 A

REVISIONS 14867

SYM	DESCRIPTION	DATE	APPROVAL
A	REVISED PER TDRR-15938	9-FEB-64	M.G. E.F.

REQUIREMENTS:

1. GENERAL:
   - A. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327.
   - B.
   - C. QUALITY ASSURANCE: PER MIL-Q-9858.
   - D. CONNECTOR IS DESIGNED TO USE PIN CONTACTS PER 1010738.

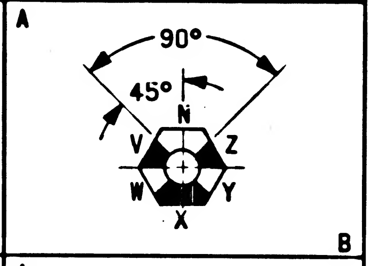
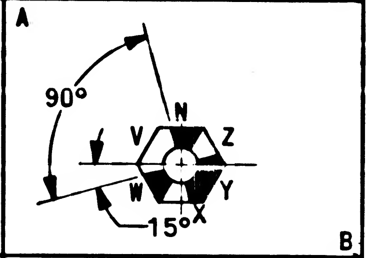
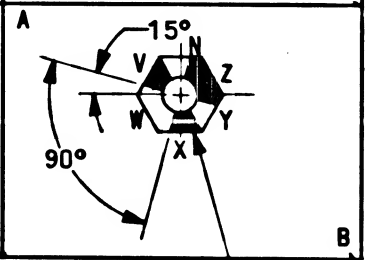
2. ACCEPTANCE AND INSPECTION:
   - A. CERTIFICATION: CONFORMANCE WITH MATERIAL AND FINISH REQUIREMENT SHALL BE CERTIFIED WITH EACH SHIPMENT.
   - B. MARKING: PARTS AND INTERNAL AND EXTERNAL PACKAGES SHALL BE PERMANENTLY AND LEGIBLY MARKED, PER ND 1002019, WITH THE MANUFACTURER'S NAME AND/OR SYMBOL, DATE OF MANUFACTURE OR DATE CODE, AND THE NASA PART NUMBER (DRAWING NUMBER AND REVISION LETTER). THE MANUFACTURER'S PART NUMBER MAY APPEAR ON PACKAGES.
   - C. ELECTRICAL CHARACTERISTICS (WHEN 1010738 CONTACTS ARE ASSEMBLED)
     - (1) INSULATION RESISTANCE (TEST PER MIL-STD-202, METHOD 302, CONDITION B) 2000 MEGOHMS MINIMUM AT 150°F BETWEEN THE MOUNTING HARDWARE AND ANY CONTACT OR BETWEEN ANY TWO ADJACENT CONTACTS.
     - (2) DIELECTRIC WITHSTANDING VOLTAGE (TEST PER MIL-STD-202, METHOD 301) SEA LEVEL - 1500 VRMS; 90,000 TO 130,000 FEET - 250 VRMS. THERE SHALL BE NO BREAKDOWN OR FLASHOVER BETWEEN THE MOUNTING HARDWARE AND ANY CONTACT OR BETWEEN ANY TWO ADJACENT CONTACTS.
   - D. PIN IDENTIFICATION SHALL BE MARKED BY RAISED MOLDED CHARACTERS.

3. DESIGN:
   - A. VOLTAGE DESIGN RATINGS:

ALTITUDE	VOLTS DC	VOLTS AC RMS
SEA LEVEL	490	350
10,000 FT.	390	280
60,000 FT.	140	100

   - B. CONTACT RETENTION FORCE: 15 POUNDS MINIMUM AXIAL LOAD WITHOUT DAMAGE TO PROPERLY INSTALLED CONTACTS APPLIED IN EITHER DIRECTION. APPLY LOAD AT ONE POUND PER SECOND RATE.
   - C. MATING CONNECTOR: 1897167 OR 1010818.

VIEWED FROM MATING FACE

NASA DASH NUMBER	POLARIZING CHART
-1	
-2	
-3	

HIGH POINTS OF POLARIZING BOSS SHADED

THIS LETTER FOR END IDENTIFICATION ONLY TYP

PROCURE ONLY FROM APPROVED SOURCES LISTED ON ND 1002034 FOR THIS DRAWING.

A	A
SHEET 1	SHEET 2

REVISION STATUS OF SHEETS

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY	USED ON

APPLICATION

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± — DECIMALS ±.010 ±.03 ANGLES ± —
DO NOT SCALE THIS DRAWING
MATERIAL SEE REQUIREMENTS
HEAT TREATMENT NONE
FINAL FINISH SEE REQUIREMENTS

MIT INSTRUMENTATION LAB
CAMBRIDGE MASS
DWG NO Contract NAS 9-497
DRAWN Bender DATE 9-NOV-64
CHECKED Ed Foster 11 Nov 64
APPROVAL 11 Nov 64
APPROVAL J. M. Watson 1 Dec 64
NASA APPROVAL
MIT APPROVAL 12/15/64

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

CONNECTOR, PLUG, ELECTRICAL
(244 PIN BODY)

SPECIFICATION CONTROL DRAWING

CODE IDENT NO.
SIZE C
NASA DRAWING NO. 1897166
SCALE NONE
WT
SHEET 1 OF 2

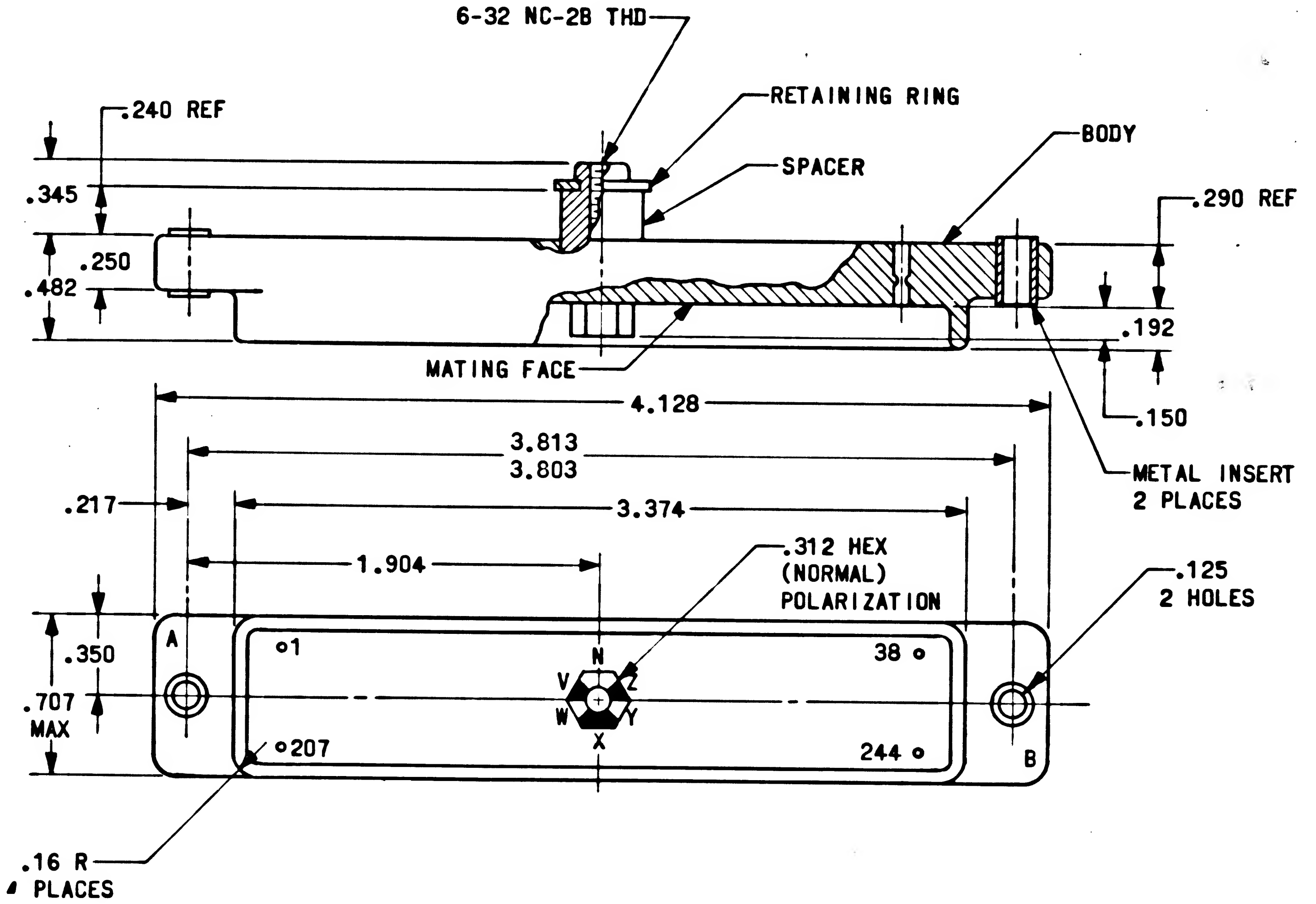
NOTICE — WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

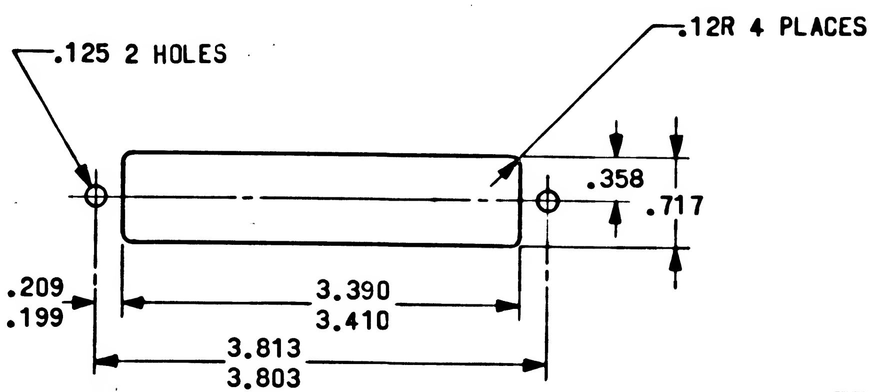
1897166 A

REVISIONS 14867

SYM	DESCRIPTION	DATE	APPROVAL
A	REVISED PER TDRR 15938	9-FEB-65	M.G. EF

D. CONSTRUCTION:
  (1) MATERIAL:
    (a) BODY SPACER: DIALLYLPHTHALATE PER MIL-M-14, TYPE SDG-F, TAN COLOR.
    (b) POLARIZING BOSS: 7075-T6 ALUMINUM ALLOY PER QQ-A-277.
    (c) METAL INSERT: CORROSION-RESISTANT STEEL PER QQ-S-763, CLASS 303 OR 303SE, CONDITION A OR B.
    (d) RETAINING RING: MS 16632-28.
  (2) FINISH:
    (a) POLARIZING BOSS: GREY ANODIZE PER MIL-A-8625, TYPE 1.
    (b) METAL INSERT: PASSIVATE PER MIL-S-5002.





RECOMMENDED MOUNTING HOLE CUTOUT

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING
MATERIAL
HEAT TREATMENT
FINAL FINISH

M I T
INSTRUMENTATION LAB
CAMBRIDGE MASS
DWG NO Contract NAS 9-497
DRAWN Bender DATE 9-NOV-64
CHECKED Ed Foster 11 Nov 64
APPROVAL [illegible] 11 Nov 64
APPROVAL J. M. Watson 1 Dec 64
NASA APPROVAL [illegible] 8/1/65
MIT APPROVAL R. Wazelwicky

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

CONNECTOR, PLUG, ELECTRICAL
(244 PIN BODY)

SPECIFICATION CONTROL DRAWING

CODE IDENT NO.
SIZE C
NASA DRAWING NO. 1897166
SCALE —
WT
SHEET 2 OF 2

NOTICE — WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

THE PART NUMBER IS THE DRAWING NUMBER PLUS THE APPLICABLE DASH NUMBER.

1897166

REVISIONS 14867			
SYM	DESCRIPTION	DATE	APPROVAL

REQUIREMENTS:

1. GENERAL:
   - A. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327.
   - B. UNITS SHALL BE CAPABLE OF MEETING THE QUALIFICATION REQUIREMENTS SPECIFIED IN ND 1002052 WHEN TESTED IN CONJUNCTION WITH PIN CONTACT 1010738. SEE NOTES 2.C AND 3.B.
   - C. QUALITY ASSURANCE: PER ND 1015404 CLASS 2.

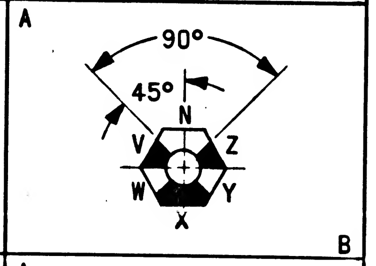
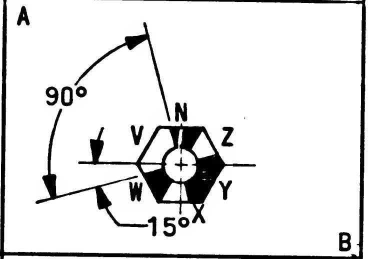
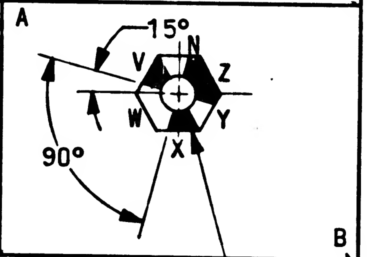
2. ACCEPTANCE AND INSPECTION:
   - A. CERTIFICATION: CONFORMANCE WITH MATERIAL AND FINISH REQUIREMENT SHALL BE CERTIFIED WITH EACH SHIPMENT.
   - B. MARKING: PARTS AND INTERNAL AND EXTERNAL PACKAGES SHALL BE PERMANENTLY AND LEGIBLY MARKED, PER ND 1002019, WITH THE MANUFACTURER'S NAME AND/OR SYMBOL, DATE OF MANUFACTURE OR DATE CODE, AND THE NASA PART NUMBER (DRAWING NUMBER AND REVISION LETTER). THE MANUFACTURER'S PART NUMBER MAY APPEAR ON PACKAGES.
   - C. ELECTRICAL CHARACTERISTICS (WHEN 1010738 CONTACTS ARE ASSEMBLED)
     - (1) INSULATION RESISTANCE (TEST PER MIL-STD-202, METHOD 302, CONDITION B) 2000 MEGOHMS MINIMUM AT 150°F BETWEEN THE MOUNTING HARDWARE AND ANY CONTACT OR BETWEEN ANY TWO ADJACENT CONTACTS.
     - (2) DIELECTRIC WITHSTANDING VOLTAGE (TEST PER MIL-STD-202, METHOD 301) SEA LEVEL - 1500 VRMS; 90,000 TO 130,000 FEET - 250 VRMS. THERE SHALL BE NO BREAKDOWN OR FLASHOVER BETWEEN THE MOUNTING HARDWARE AND ANY CONTACT OR BETWEEN ANY TWO ADJACENT CONTACTS.
   - D. PIN IDENTIFICATION SHALL BE MARKED BY RAISED MOLDED CHARACTERS.

3. DESIGN:
   - A. VOLTAGE DESIGN RATINGS:

ALTITUDE	VOLTS DC	VOLTS AC RMS
SEA LEVEL	490	350
10,000 FT.	390	280
60,000 FT.	140	100

   - B. CONTACT RETENTION FORCE: 15 POUNDS MINIMUM AXIAL LOAD WITHOUT DAMAGE TO PROPERLY INSTALLED CONTACTS APPLIED IN EITHER DIRECTION. APPLY LOAD AT ONE POUND PER SECOND RATE.
   - C. MATING CONNECTOR: 1897167.

VIEWED FROM MATING FACE

NASA DASH NUMBER	POLARIZING CHART
-1	
-2	
-3	

HIGH POINTS OF POLARIZING BOSS SHADED

THIS LETTER FOR END IDENTIFICATION ONLY TYP

PROCURE ONLY FROM APPROVED SOURCES LISTED ON ND 1002034 FOR THIS DRAWING.

SHEET 1	SHEET 2
REVISION STATUS OF SHEETS	

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± —
DECIMALS ±.010 ±.03
ANGLES ± —
DO NOT SCALE THIS DRAWING
MATERIAL SEE REQUIREMENTS
HEAT TREATMENT NONE
FINAL FINISH SEE REQUIREMENTS

MIT
INSTRUMENTATION LAB
CAMBRIDGE, MASS.
DWG NO. Contract NAS 9-497
DRAWN Bender DATE 9-NOV-64
CHECKED Ed Foster 11 Nov 64
APPROVAL 11 Nov 64
APPROVAL J.M. Watson 1 Dec 64
NASA APPROVAL
MIT APPROVAL 12/15/64

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

CONNECTOR, PLUG, ELECTRICAL
(244 PIN BODY)

SPECIFICATION CONTROL DRAWING

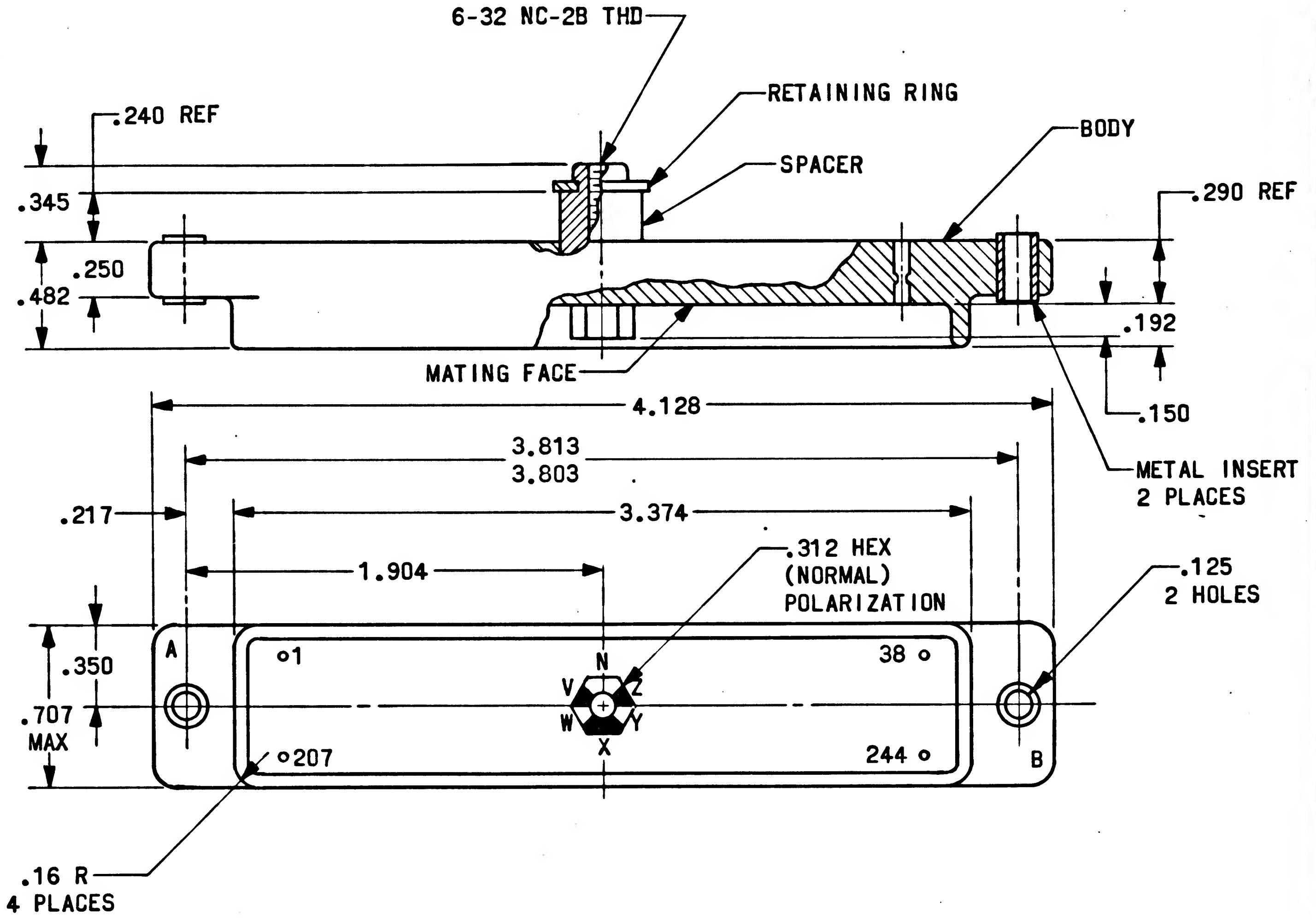
CODE IDENT NO.
SIZE C
NASA DRAWING NO. 1897166
SCALE NONE
WT
SHEET 1 OF 2

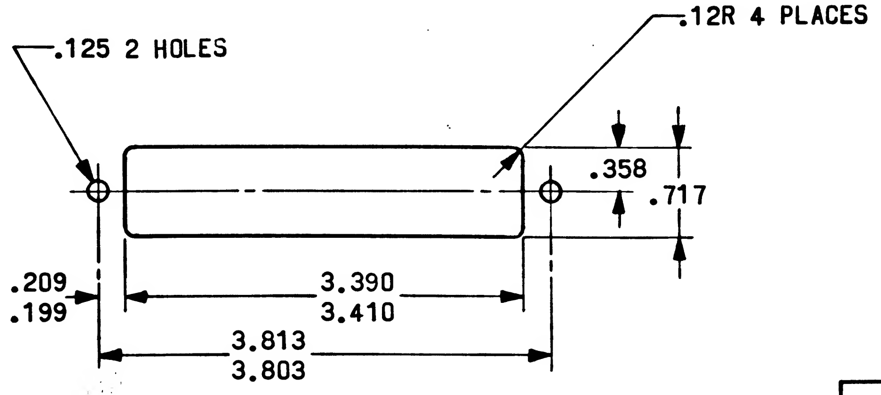
NOTICE — WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER, AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

1897166

SYM	REVISIONS 14867 DESCRIPTION	DATE	APPROVAL

D. CONSTRUCTION:
- (1) MATERIAL:
  - (a) BODY SPACER: DIALLYLPHTHALATE PER MIL-M-14, TYPE SDG-F, TAN COLOR
  - (b) POLARIZING BOSS: 7075-T6 ALUMINUM ALLOY PER QQ-A-277.
  - (c) METAL INSERT: CORROSION-RESISTANT STEEL PER QQ-S-763, CLASS 303 OR 303SE, CONDITION A OR B.
  - (d) RETAINING RING: MS 16632-28
- (2) FINISH:
  - (a) POLARIZING BOSS: GREY ANODIZE PER MIL-A-8625, TYPE 1.
  - (b) METAL INSERT: PASSIVATE PER MIL-F-14072, E300





RECOMMENDED MOUNTING HOLE CUTOUT

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY | USED ON
APPLICATION

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING
MATERIAL
HEAT TREATMENT
FINAL FINISH

MIT
INSTRUMENTATION LAB
CAMBRIDGE, MASS
DWG NO Contract NAS 9-497
DRAWN Bender DATE 9-NOV-64
CHECKED Ed Foster 11 Nov 64
APPROVAL 11 Nov 64
APPROVAL J. M. Watson 10 Dec 64
NASA APPROVAL
MIT APPROVAL

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

CONNECTOR, PLUG, ELECTRICAL
(244 PIN BODY)

SPECIFICATION CONTROL DRAWING

CODE IDENT NO. | SIZE C | NASA DRAWING NO. 1897166
SCALE — | WT | SHEET 2 OF 2

INCHES
0 1 2
PHOTOGRAPHIC SCALE ONLY

NOTICE — WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER, AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO

THE PART NUMBER IS THE DRAWING NUMBER PLUS THE APPLICABLE DASH NUMBER.

1897167 | A

REVISIONS 14867			
SYM	DESCRIPTION	DATE	APPROVAL
A	REVISED PER TDRR 15983	10 FEB 65	J JJ / W.D.

REQUIREMENTS:

1. GENERAL:
   A. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327.
   B.
   C. QUALITY ASSURANCE: PER MIL-Q-9858.
   D. CONNECTOR IS DESIGNED TO USE SOCKET CONTACTS PER 1010738.

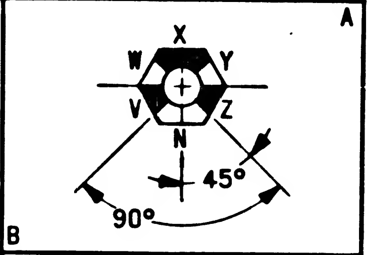
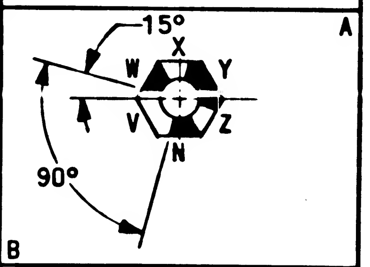
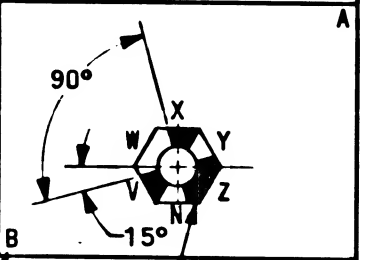
2. ACCEPTANCE AND INSPECTION:
   A. CERTIFICATION: CONFORMANCE WITH MATERIAL AND FINISH REQUIREMENT SHALL BE CERTIFIED WITH EACH SHIPMENT.
   B. MARKING: PARTS AND INTERNAL AND EXTERNAL PACKAGES SHALL BE PERMANENTLY AND LEGIBLY MARKED, PER ND 1002019, WITH THE MANUFACTURER'S NAME AND/OR SYMBOL, DATE OF MANUFACTURE OR DATE CODE, AND THE NASA PART NUMBER (DRAWING NUMBER AND REVISION LETTER). THE MANUFACTURER'S PART NUMBER MAY APPEAR ON PACKAGES.
   C. ELECTRICAL CHARACTERISTICS (WHEN 1010738 CONTACTS ARE ASSEMBLED)
      (1) INSULATION RESISTANCE (TEST PER MIL-STD-202, METHOD 302, CONDITION B) 2000 MEGOHMS MINIMUM AT 150°F BETWEEN THE MOUNTING HARDWARE AND ANY CONTACT OR BETWEEN ANY TWO ADJACENT CONTACTS.
      (2) DIELECTRIC WITHSTANDING VOLTAGE (TEST PER MIL-STD-202, METHOD 301) SEA LEVEL - 1500 VRMS; 90,000 TO 13,000 FEET - 250 VRMS; THERE SHALL BE NO BREAKDOWN OR FLASHOVER BETWEEN THE MOUNTING HARDWARE AND ANY CONTACT OR BETWEEN ANY TWO ADJACENT CONTACTS.
   D. PIN IDENTIFICATION SHALL BE MARKED BY RAISED MOLDED CHARACTERS.

3. DESIGN:
   A. VOLTAGE DESIGN RATINGS:

ALTITUDE	VOLTS DC	VOLTS AC RMS
SEA LEVEL	490	350
10,000 FT.	390	280
60,000 FT.	140	100

   B. CONTACT RETENTION FORCE: 15 POUNDS MINIMUM AXIAL LOAD WITHOUT DAMAGE TO PROPERLY INSTALLED CONTACTS APPLIED IN EITHER DIRECTION. APPLY LOAD AT ONE POUND PER SECOND RATE.
   C. MATING CONNECTOR: 1897168 OR 1010817.

VIEW FROM MATING FACE

NASA DASH NUMBER	POLARIZING POSITION
-1	
-2	
-3	

THIS LETTER FOR END IDENTIFICATION ONLY TYP

HIGH POINTS OF POLARIZING BOSS SHADED

PROCURE ONLY FROM APPROVED SOURCES LISTED ON ND 1002034 FOR THIS DRAWING.

A	A
SHEET 1	SHEET 2
REVISION STATUS OF SHEETS	

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.
LIST OF MATERIALS			

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± —
DECIMALS ±.010 ±.03
ANGLES ± —
DO NOT SCALE THIS DRAWING
MATERIAL SEE REQUIREMENTS
HEAT TREATMENT NONE
FINAL FINISH SEE REQUIREMENTS

MIT
INSTRUMENTATION LAB
CAMBRIDGE MASS
DWG NO
Contract NAS 9-497

DRAWN Bender DATE 9-NOV-64
CHECKED Ed Foster 10 Nov 64
APPROVAL Dinsmore Lewis 11 Nov 64
APPROVAL J. M. Watson 1 Dec. 64
NASA APPROVAL 1/4/65
MIT APPROVAL 12/15/64

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

CONNECTOR, RECEPTACLE, ELECTRICAL
(244 SOCKET BODY)

SPECIFICATION CONTROL DRAWING

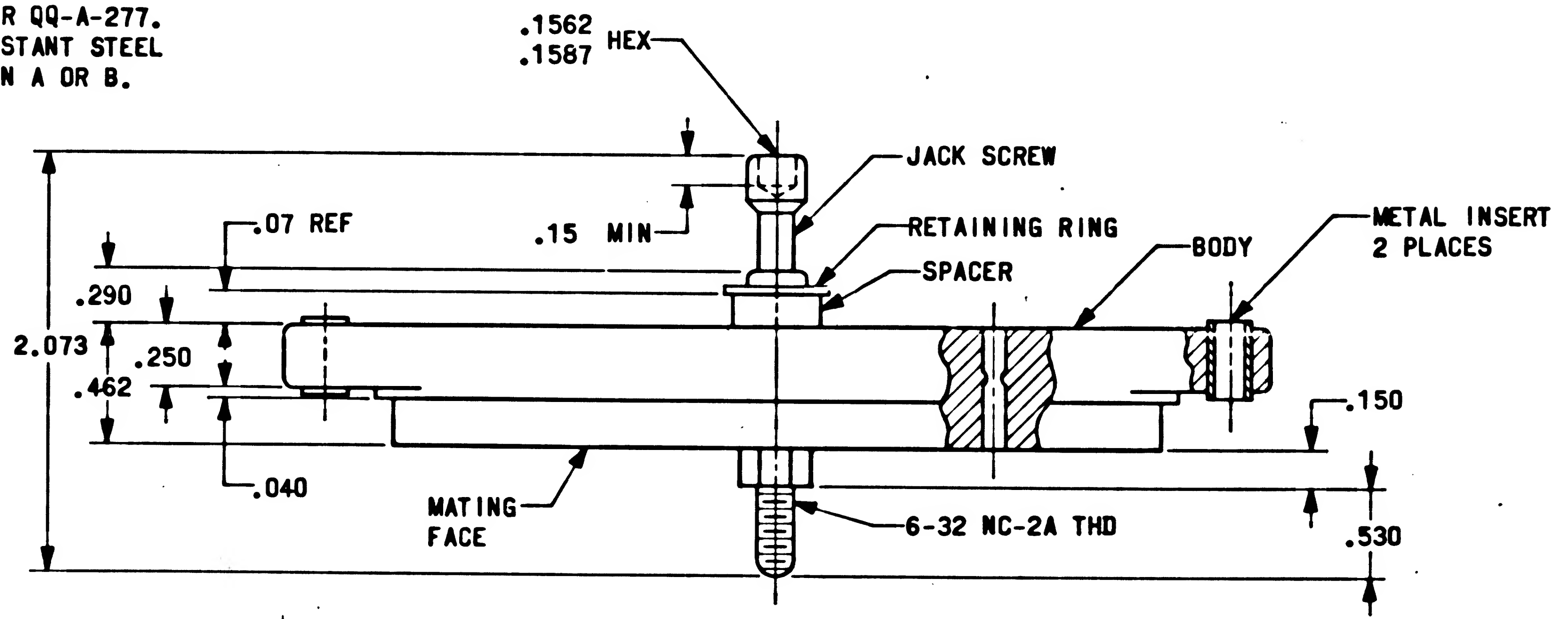
CODE IDENT NO.
SIZE C
NASA DRAWING NO. 1897167
SCALE NONE
WT
SHEET 1 OF 2

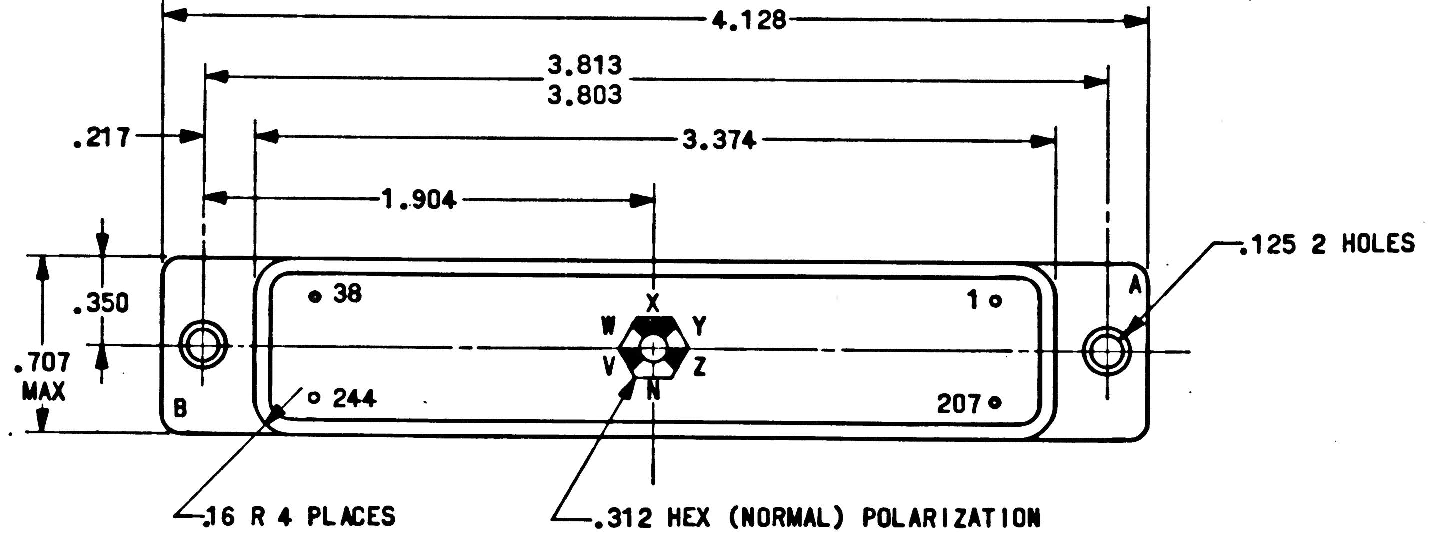
1897167

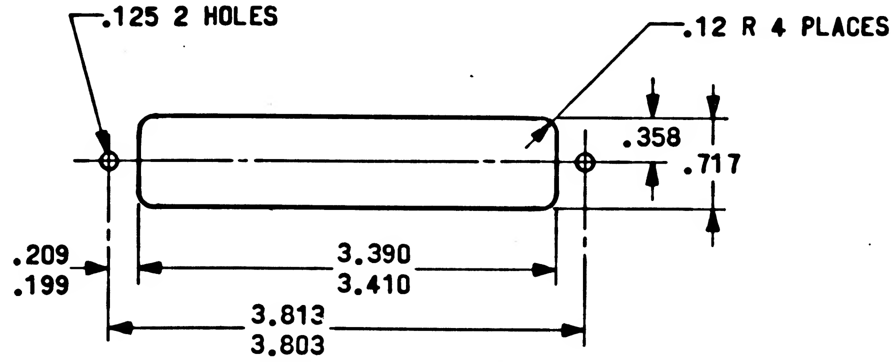
NOTICE — WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER, AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REVISIONS 14867			
SYM	DESCRIPTION	DATE	APPROVAL
A	REVISED PER TDRR 15983	10 FEB 65	JJJ / WD

D. CONSTRUCTION:
- (1) MATERIAL:
  - (a) BODY SPACER: DIALLYLPHTHALATE PER MIL-M-14, TYPE SDG-F, TAN COLOR
  - (b) POLARIZING BOSS: 7075-T6 ALUMINUM ALLOY PER QQ-A-277.
  - (c) JACKSCREW AND METAL INSERT: CORROSION-RESISTANT STEEL PER QQ-S-763, CLASS 303 OR 303SE, CONDITION A OR B.
  - (d) RETAINING RING: MS 16632-28
- (2) FINISH:
  - (a) POLARIZING BOSS: GRAY ANODIZE PER MIL-A-8625, TYPE 1.
  - (b) JACKSCREW AND METAL INSERT: PASSIVATE PER MIL-S-5002.
- (3) JACKSCREW IS LUBRICATED







RECOMMENDED MOUNTING HOLE CUTOUT

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY | USED ON
APPLICATION

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING
MATERIAL
HEAT TREATMENT
FINAL FINISH

MIT INSTRUMENTATION LAB
CAMBRIDGE, MASS
DWG NO Contract NAS 9-497
DRAWN Bender DATE 9-NOV-64
CHECKED Ed Foster 10 Nov 64
APPROVAL Duncan Lewis 11 Nov 64
APPROVAL J. M. Watson 10 Dec 64
NASA APPROVAL A. C. Metzger 1/4/65
MIT APPROVAL 1/15/65

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

CONNECTOR, RECEPTACLE, ELECTRICAL
(244 SOCKET BODY)

SPECIFICATION CONTROL DRAWING

CODE IDENT NO. | SIZE C | NASA DRAWING NO. 1897167
SCALE | WT | SHEET 2 OF 2

NOTICE — WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER, AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

THE PART NUMBER IS THE DRAWING NUMBER PLUS THE APPLICABLE DASH NUMBER.

1897167

REVISIONS 14867			
SYM	DESCRIPTION	DATE	APPROVAL

REQUIREMENTS:

1. GENERAL:
   A. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327.
   B. UNITS SHALL BE CAPABLE OF MEETING THE QUALIFICATION REQUIREMENTS SPECIFIED IN ND 1002052 WHEN TESTED IN CONJUNCTION WITH PIN CONTACT 1010738. SEE NOTES 2.D AND 3.B.
   C. QUALITY ASSURANCE: PER ND 1015404 CLASS 2.

2. ACCEPTANCE AND INSPECTION:
   A. CERTIFICATION: CONFORMANCE WITH MATERIAL AND FINISH REQUIREMENT SHALL BE CERTIFIED WITH EACH SHIPMENT.

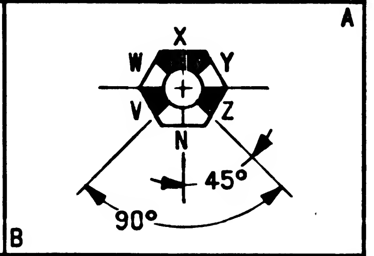
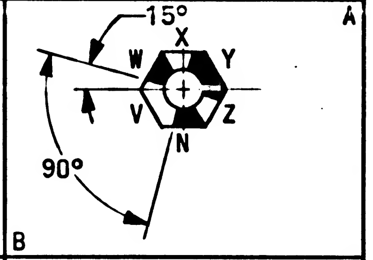
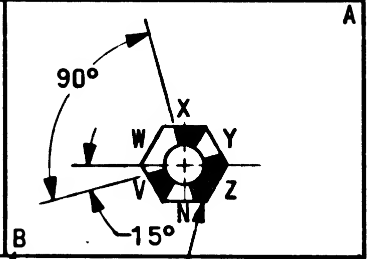
   B. MARKING: PARTS AND INTERNAL AND EXTERNAL PACKAGES SHALL BE PERMANENTLY AND LEGIBLY MARKED, PER ND 1002019, WITH THE MANUFACTURER'S NAME AND/OR SYMBOL, DATE OF MANUFACTURE OR DATE CODE, AND THE NASA PART NUMBER (DRAWING NUMBER AND REVISION LETTER). THE MANUFACTURER'S PART NUMBER MAY APPEAR ON PACKAGES.
   C. ELECTRICAL CHARACTERISTICS (WHEN 1010738 CONTACTS ARE ASSEMBLED)
      (1) INSULATION RESISTANCE (TEST PER MIL-STD-202, METHOD 302, CONDITION B) 2000 MEGOHMS MINIMUM AT 150°F BETWEEN THE MOUNTING HARDWARE AND ANY CONTACT OR BETWEEN ANY TWO ADJACENT CONTACTS.
      (2) DIELECTRIC WITHSTANDING VOLTAGE (TEST PER MIL-STD-202, METHOD 301) SEA LEVEL - 1500 VRMS; 90,000 TO 13,000 FEET - 250 VRMS; THERE SHALL BE NO BREAKDOWN OR FLASHOVER BETWEEN THE MOUNTING HARDWARE AND ANY CONTACT OR BETWEEN ANY TWO ADJACENT CONTACTS.
   D. PIN IDENTIFICATION SHALL BE MARKED BY RAISED MOLDED CHARACTERS.

3. DESIGN:
   A. VOLTAGE DESIGN RATINGS:

ALTITUDE	VOLTS DC	VOLTS AC RMS
SEA LEVEL	490	350
10,000 FT.	390	280
60,000 FT.	140	100

   B. CONTACT RETENTION FORCE: 15 POUNDS MINIMUM AXIAL LOAD WITHOUT DAMAGE TO PROPERLY INSTALLED CONTACTS APPLIED IN EITHER DIRECTION. APPLY LOAD AT ONE POUND PER SECOND RATE.
   C. MATING CONNECTOR: 1897166.

VIEW FROM MATING FACE

NASA DASH NUMBER	POLARIZING POSITION
-1	
-2	
-3	

THIS LETTER FOR END IDENTIFICATION ONLY TYP

HIGH POINTS OF POLARIZING BOSS SHADED

PROCURE ONLY FROM APPROVED SOURCES LISTED ON ND 1002034 FOR THIS DRAWING.

SHEET 1	SHEET 2
REVISION STATUS OF SHEETS	

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± — DECIMALS ±.010 ±.03 ANGLES ± —
DO NOT SCALE THIS DRAWING

MATERIAL SEE REQUIREMENTS

HEAT TREATMENT NONE

FINAL FINISH SEE REQUIREMENTS

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

MIT
INSTRUMENTATION LAB
CAMBRIDGE MASS
DWG. NO. Contract NAS 9-497

DRAWN Bender DATE 9-NOV-64
CHECKED Ed Foster 10 Nov 64
APPROVAL Duncan Lewis 11 Nov 64
APPROVAL J. M. Watson 1 Dec. 64

NASA APPROVAL 12/15

MIT APPROVAL 12/15/64

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

CONNECTOR, RECEPTACLE, ELECTRICAL
(244 SOCKET BODY)

SPECIFICATION CONTROL DRAWING

CODE IDENT NO.
SIZE C
NASA DRAWING NO. 1897167
SCALE NONE
WT
SHEET 1 OF 2

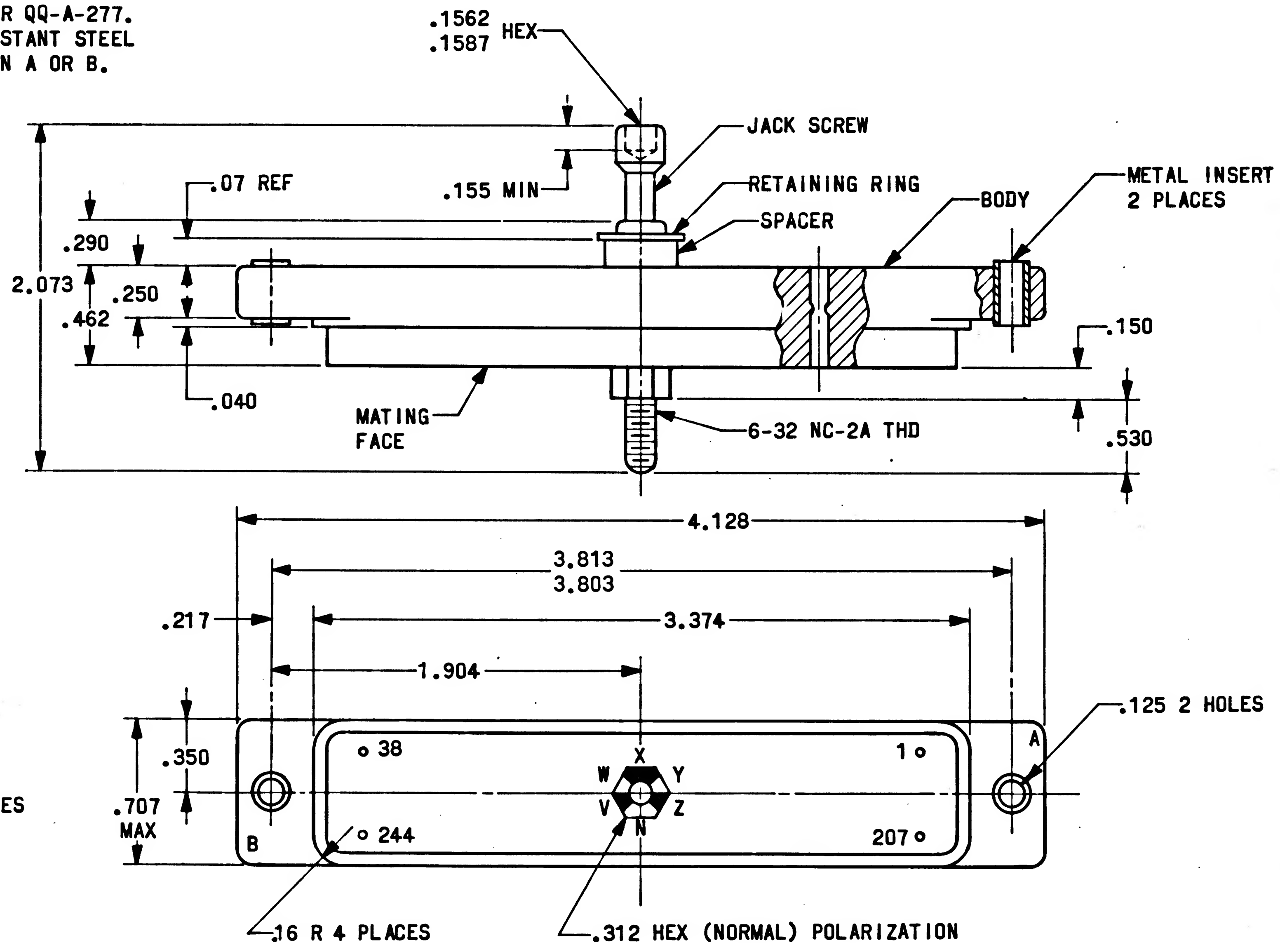
NOTICE — WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER, AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

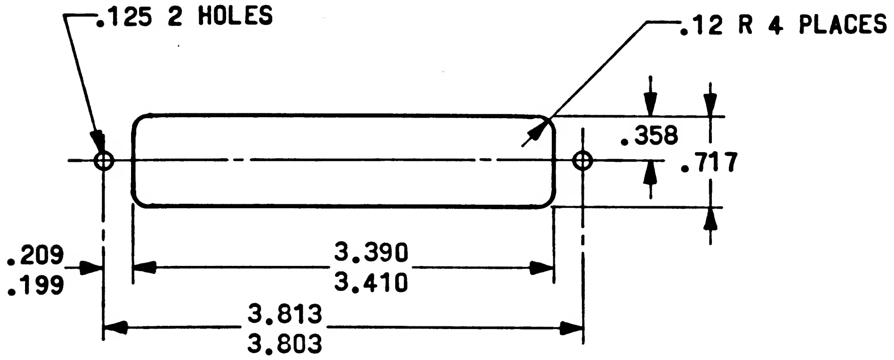
1897167

SYM	DESCRIPTION	DATE	APPROVAL

REVISIONS 14867

D. CONSTRUCTION:
- (1) MATERIAL:
  - (a) BODY SPACER: DIALLYLPHTHALATE PER MIL-M-14, TYPE SDG-F, TAN COLOR
  - (b) POLARIZING BOSS: 7075-T6 ALUMINUM ALLOY PER QQ-A-277.
  - (c) JACKSCREW AND METAL INSERT: CORROSION-RESISTANT STEEL PER QQ-S-763, CLASS 303 OR 303SE, CONDITION A OR B.
  - (d) RETAINING RING: MS 16632-28
- (2) FINISH:
  - (a) POLARIZING BOSS: GRAY ANODIZE PER MIL-A-8625, TYPE 1.
  - (b) JACKSCREW AND METAL INSERT: PASSIVATE PER MIL-F-14072, E300
- (3) JACKSCREW IS LUBRICATED





RECOMMENDED MOUNTING
HOLE CUTOUT

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING
MATERIAL
HEAT TREATMENT
FINAL FINISH

MIT
INSTRUMENTATION LAB
CAMBRIDGE, MASS
DWG. NO. Contract NAS 9-497

DRAWN Bender DATE 9-NOV-64
CHECKED Ed Foster 10 Nov 64
APPROVAL [illegible] 11 Nov 64
APPROVAL J. M. Watson 10 Dec 64
NASA APPROVAL [illegible] 1/15
MIT APPROVAL [illegible] 1/15/67

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

CONNECTOR, RECEPTACLE, ELECTRICAL
(244 SOCKET BODY)

SPECIFICATION CONTROL DRAWING

CODE IDENT NO.
SIZE C
NASA DRAWING NO. 1897167
SCALE
WT
SHEET 2 OF 2

INCHES
0 1 2
PHOTOGRAPHIC SCALE ONLY

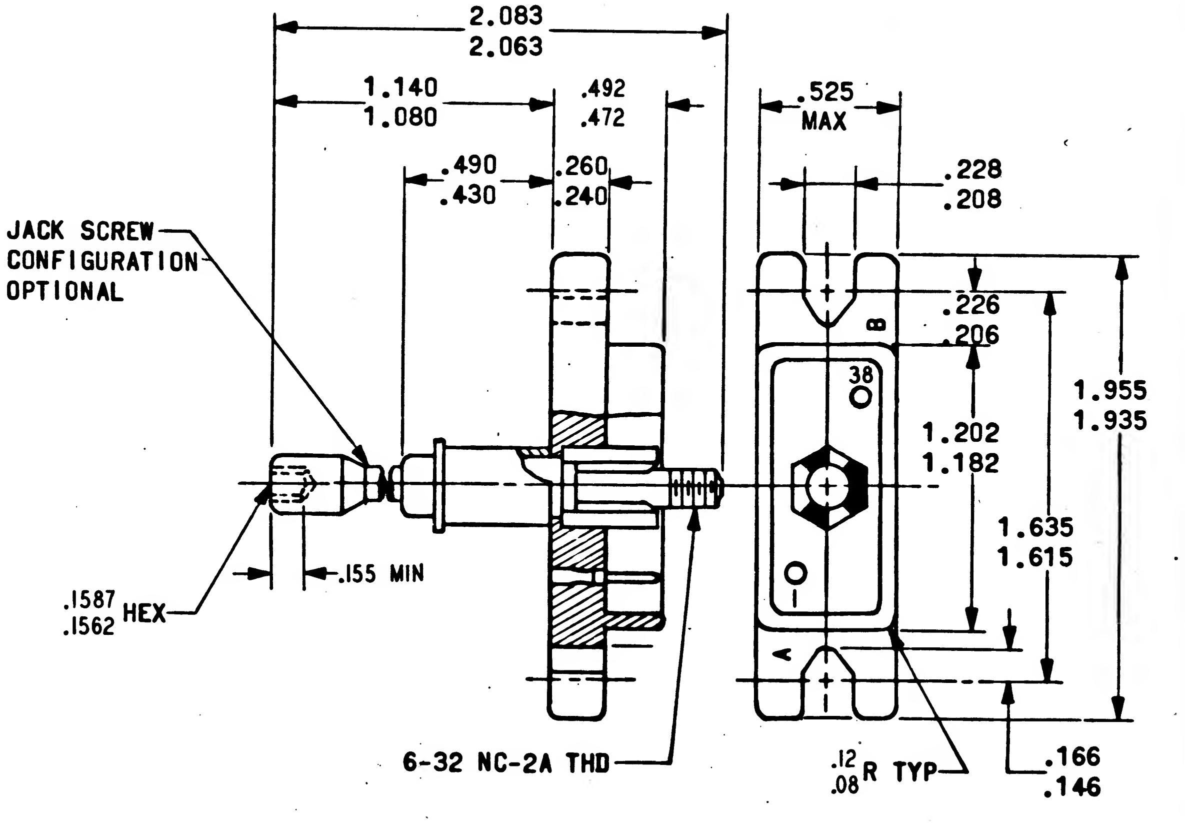
NOTICE — WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REVISIONS 14867			
SYM	DESCRIPTION	DATE	APPROVAL

REQUIREMENTS:

1. GENERAL:
   - A. INTERPRET DRAWINGS IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327.
   - B. SUPPLIER SHALL CONFORM TO THE QUALITY ASSURANCE PROVISIONS SPECIFIED IN ND 1015404, CLASS 2.
   - C. UNITS SHALL BE CAPABLE OF MEETING ALL QUALIFICATION REQUIREMENTS SPECIFIED IN ND 1002052.
   - D. CONNECTOR IS DESIGNED TO USE PIN CONTACTS PER 1010738.

2. INSPECTION AND ACCEPTANCE:
   - A. MECHANICAL REQUIREMENTS:
     - (1) MATERIAL:
       - (a) BODY: DIALLYLPHTHALATE PER MIL-M-14, TYPE SDG-F TAN COLOR
       - (b) HARDWARE:
         - POLARIZING BOSS: ALUMINUM ALLOY GRADE 7075T6 PER QQ-A-277-1.
         - JACKSCREW AND METAL INSERT: CORROSION RESISTANT STEEL, CLASS 303, OR 303 SE CONDITION A OR B PER MILITARY SPECIFICATION QQ-S-763.
         - SPACER: DIALLYLPHTHALATE PER MIL-M-14 TYPE SDG-F (TAN COLOR)
         - RETAINING RING: MS-16632-28 PER MILITARY SPECIFICATION MIL-R-21248.
     - (2) FINISH:
       - (a) HARDWARE:
         - POLARIZING BOSS: GRAY ANODIZE PER SPECIFICATION MIL-A-8625, TYPE I
         - JACKSCREW AND METAL INSERT: PASSIVATE PER MIL-F-14072 FINISH NO. E-300. JACKSCREW IS LUBRICATED.
     - (3) FOR POLARIZATION SEE TABLE I
     - (4) DIMENSIONS: AS PER DRAWING
     - (5) MARKING:
       - (a) PIECEMARKING: UNITS SHALL BE MARKED IN ACCORDANCE WITH ND 1002019 WITH THE MANUFACTURER'S NAME AND/OR SYMBOL, NASA PART NUMBER, AND REVISION LETTER, LOT OR SERIAL NUMBER TRACEABLE TO THE DATE OF MANUFACTURE. THE MANUFACTURER'S PART NUMBER MAY APPEAR ON THE PART.
       - (b) PACKAGE: INTERNAL INDIVIDUAL OR COLLECTIVE PACKAGES AND EXTERNAL PACKAGING SHALL BE MARKED WITH THE FOLLOWING INFORMATION:
         - SUPPLIER'S NAME
         - NASA PART NUMBER AND REVISION LETTER
         - SUPPLIER'S LOT OR SERIAL NUMBER
       - (c) MANUFACTURER'S PART NUMBER MAY APPEAR ON THE PACKAGE.



PROCURE ONLY FROM APPROVED SOURCES LISTED ON ND 1002034 FOR THIS DRAWING.

SHEET 1	SHEET 2
REVISION STATUS OF SHEETS	

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± —
DECIMALS ±.010 ±.03
ANGLES ± —
DO NOT SCALE THIS DRAWING

MATERIAL SEE REQUIREMENTS
HEAT TREATMENT NONE
FINAL FINISH NONE

M I T
INSTRUMENTATION LAB
CAMBRIDGE MASS
DWG NO Contract NAS 9-497

DRAWN Bender DATE 29-OCT-64
CHECKED Ed Foster 30 OCT 64
APPROVAL Jameson [illegible] 30 OCT 64
APPROVAL J. M. Watson 1 Dec 64
NASA APPROVAL [illegible]
MIT APPROVAL [illegible]

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

CONNECTOR, PLUG, ELECTRICAL
(38 NO. 22 PIN CONTACTS)

SPECIFICATION CONTROL DRAWING

CODE IDENT NO.	SIZE	NASA DRAWING NO.
	C	1897169
SCALE NONE	WT	SHEET 1 OF 2

INCHES
0 1 2
PHOTOGRAPHIC SCALE ONLY

1897169

SYM	DESCRIPTION	DATE	APPROVAL

REVISIONS 14,867

NOTICE — WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS, OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

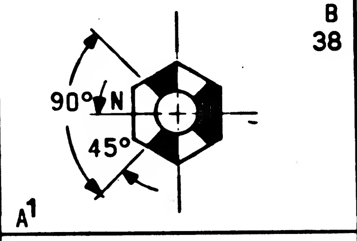
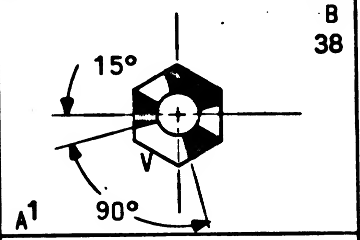
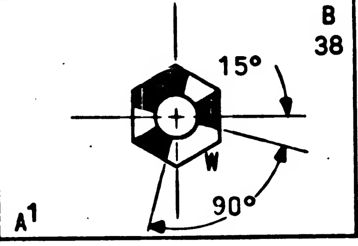
REQUIREMENTS: (CONTINUED)

3. DESIGN REQUIREMENTS:
   - A. ELECTRICAL REQUIREMENTS WITH CONTACTS INSTALLED
     - (1) INSULATION RESISTANCE: 2000 MEGOHMS MINIMUM AT 150°F MEASURED BETWEEN ANY TWO ADJACENT CONTACTS AND BETWEEN THE SHELL OR HARDWARE AND ANY ADJACENT CONTACT WHEN TESTED IN ACCORDANCE WITH MIL-STD-202 METHOD 302, CONDITION C.
     - (2) DIELECTRIC STRENGTH: SEA LEVEL - NO EVIDENCE OF BREAKDOWN OR FLASHOVER WHEN TESTED AT 600 VRMS. 90,000 TO 130,000 FT. - NO EVIDENCE OF BREAKDOWN OR FLASHOVER WHEN 100 VRMS APPLIED BETWEEN ANY PAIR OF CONTACTS AND BETWEEN THE HARDWARE AND ANY CONTACT WHEN TESTED IN ACCORDANCE WITH MIL-STD-202, METHOD 301.
     - (3) VOLTAGE RATINGS:

	VOLTS DC	VOLTS AC RMS
SEA LEVEL	490	350
10,000 FT.	390	280
60,000 FT.	140	100

WITHSTANDING VOLTAGE (SEA LEVEL) 1500 VOLTS RMS 60 CPS WITHOUT FLASHOVER.

   - B. MECHANICAL
     - (1) CONTACT RETENTION FORCE: WHEN CONTACTS ARE PROPERLY INSTALLED IN THEIR USING CONNECTOR, THEY ARE CAPABLE OF WITHSTANDING (WITHOUT DAMAGE) A MIN OF 15 LBS. AXIAL LOAD APPLIED IN EITHER DIRECTION AT A RATE OF 1 POUND PER SECOND.

NASA DASH NUMBER	POLARIZING CHART	NO. OF CONTACTS
-1		38
-2		38
-3		38

NOTES:

1. SHADED PORTION INDICATES HIGH POINTS ON HEX.
2. DIMENSIONAL OUTLINE DRAWING SHOWS "N" POLARIZATION
3. MATES WITH 1010821

THE PART NUMBER IS THE DRAWING NUMBER PLUS THE APPLICABLE DASH NUMBER.

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING
MATERIAL
HEAT TREATMENT
FINAL FINISH

MIT
INSTRUMENTATION LAB
CAMBRIDGE MASS
DWG NO Contract NAS 9-497
DRAWN Bender DATE 29-OC -64
CHECKED Ed Foster 30 OCT 64
APPROVAL 30 OCT 64
APPROVAL J. M. Watson 1 DEC 64
NASA APPROVAL 12/11
MIT APPROVAL 12/15/64

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

CONNECTOR, PLUG, ELECTRICAL
(38 NO. 22 PIN CONTACTS)

SPECIFICATION CONTROL DRAWING

CODE IDENT NO.
SIZE C
NASA DRAWING NO. 1897169
SCALE
WT
SHEET 2 OF 2

MASTER

INCHES
0 1 2
PHOTOGRAPHIC SCALE ONLY

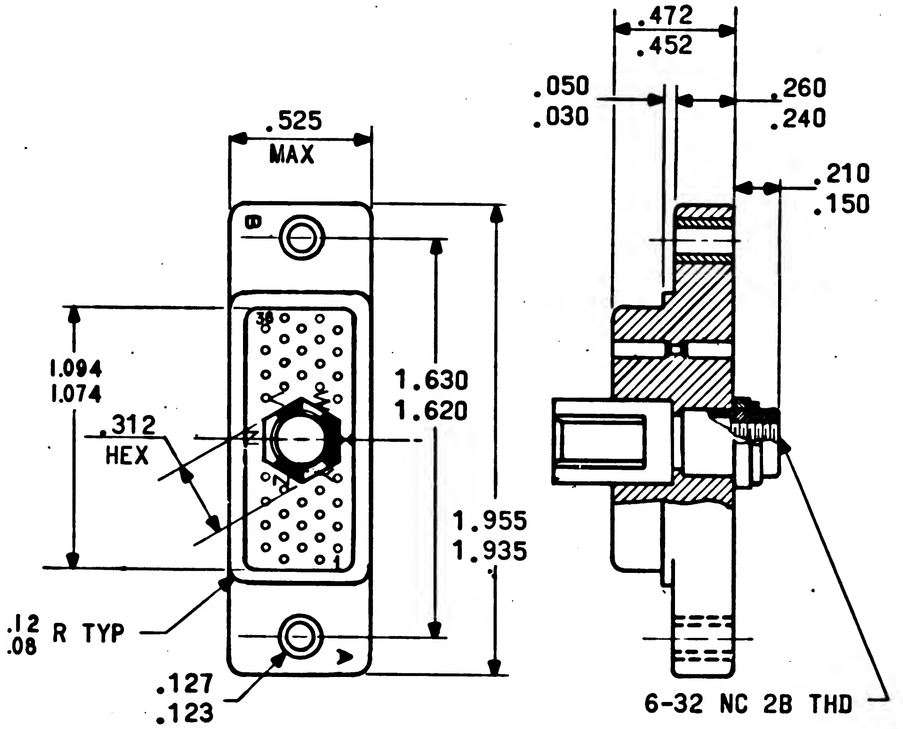
REVISIONS 14867			
SYM	DESCRIPTION	DATE	APPROVAL

NOTICE — WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO

REQUIREMENTS:

1. GENERAL:
   - A. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327.
   - B. SUPPLIER SHALL CONFORM TO THE QUALITY ASSURANCE PROVISIONS SPECIFIED IN ND 1015404, CLASS 2.
   - C. UNITS SHALL BE CAPABLE OF MEETING ALL QUALIFICATION REQUIREMENTS SPECIFIED IN ND 1002052.
   - D. SOCKET CONTACTS ARE TO BE PROCURED SEPARATELY PER 1010738.

2. INSPECTION AND ACCEPTANCE:
   - A. MECHANICAL REQUIREMENTS:
     - (1) MATERIAL:
       - (a) BODY: DIALLYLPHTHALATE PER MIL-M-14, TYPE SDG-F (TAN COLOR)
       - (b) HARDWARE:
         - POLARIZING BOSS: ALUMINUM ALLOY GRADE 7075TE PER QQ-A-277-1
         - METAL INSERT: CORROSION RESISTANT STEEL, CLASS 303, OR 303 SE CONDITION A OR B PER MILITARY SPECIFICATION QQ-S-763.
         - SPACER: DIALLYLPHTHALATE PER MIL-M-14, TYPE SDG-F (TAN COLOR)
         - RETAINING RING: MS-16632-28 PER MILITARY SPECIFICATION MIL-R-21248.
     - (2) FINISH:
       - (a) HARDWARE:
         - POLARIZING BOSS: GRAY ANODIZE PER SPECIFICATION MIL-A-8625 TYPE 1.
         - METAL INSERT: PASSIVATE PER MIL-F-14072 FINISH NO. E-300.
     - (3) FOR POLARIZATION SEE TABLE I
     - (4) DIMENSIONS: AS PER DRAWING
     - (5) MARKING:
       - (a) PIECEMARKING: UNITS SHALL BE MARKED IN ACCORDANCE WITH ND 1002019 WITH THE MANUFACTURER'S NAME AND/OR SYMBOL, NASA PART NUMBER, AND REVISION LETTER, AND MANUFACTURER'S LOT OR SERIAL NUMBER TRACEABLE TO DATE OF MANUFACTURE. THE MANUFACTURER'S PART NUMBER MAY APPEAR ON THE PART.
       - (b) PACKAGE: INTERNAL INDIVIDUAL OR COLLECTIVE PACKAGES AND EXTERNAL PACKAGING SHALL BE MARKED WITH THE FOLLOWING INFORMATION:
         - SUPPLIER'S NAME
         - NASA PART NUMBER AND REVISION LETTER
         - SUPPLIER'S LOT OR SERIAL NUMBER
       - (c) MANUFACTURER'S PART NUMBER MAY APPEAR ON THE PACKAGE.



PROCURE ONLY FROM APPROVED SOURCES LISTED ON ND 1002034 FOR THIS DRAWING.

SHEET 1	SHEET 2	
REVISION STATUS OF SHEETS		

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ±
DECIMALS ±.010 ±.03
ANGLES ±
DO NOT SCALE THIS DRAWING

MATERIAL: SEE REQUIREMENTS
HEAT TREATMENT: NONE
FINAL FINISH: NONE

M I T
INSTRUMENTATION LAB
CAMBRIDGE, MASS.
DWG. NO. Contract NAS 9-497

DRAWN Toro DATE 30 Oct64
CHECKED Ed Foster 30 Oct 64
APPROVAL 2 Nov 64
APPROVAL J. M. Watson 1 Dec 64
NASA APPROVAL 12/15
MIT APPROVAL 12/15/64

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

CONNECTOR, RECEPTACLE, ELECTRICAL 38 NO. 22 SOCKET CONTACTS SPECIFICATION CONTROL DRAWING

CODE IDENT NO.	SIZE	NASA DRAWING NO.
	C	1897170

SCALE NONE WT SHEET 1 OF 2

INCHES
0 1 2
PHOTOGRAPHIC SCALE ONLY

SYM	DESCRIPTION	DATE	APPROVAL
REVISIONS 14867			

NOTICE — WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REQUIREMENTS: (CONTINUED)

3. DESIGN REQUIREMENTS:
   A. ELECTRICAL REQUIREMENTS WITH CONTACTS INSTALLED
      (1) INSULATION RESISTANCE: 2000 MEGOHM MINIMUM AT +150°F MEASURED BETWEEN ANY TWO ADJACENT CONTACTS AND BETWEEN THE SHELL OR HARDWARE AND ANY ADJACENT CONTACT WHEN TESTED IN ACCORDANCE WITH MIL-STD-202 METHOD 302, CONDITION C.
      (2) DIELECTRIC STRENGTH: SEA LEVEL - NO EVIDENCE OF BREAKDOWN OR FLASHOVER WHEN TESTED AT 600 VRMS. 90,000 TO 130,000 FT. - NO EVIDENCE OF BREAKDOWN OR FLASHOVER WHEN 100 VRMS APPLIED BETWEEN ANY PAIR OF CONTACTS AND BETWEEN THE HARDWARE AND ANY CONTACT WHEN TESTED IN ACCORDANCE WITH MIL-STD-202, METHOD 301.
      (3) VOLTAGE RATINGS:

	VOLTS DC	VOLTS AC RMS
SEA LEVEL	490	350
10,000 FT.	390	280
60,000 FT.	140	100

WITHSTANDING VOLTAGE (SEA LEVEL) 1500 VOLTS RMS 60 CPS WITHOUT FLASHOVER.

   B. MECHANICAL:
      (1) CONTACT RETENTION FORCE: WHEN CONTACTS ARE PROPERLY INSTALLED IN THEIR USING CONNECTOR, THEY ARE CAPABLE OF WITHSTANDING (WITHOUT DAMAGE) A MIN OF 15 LBS. AXIAL LOAD APPLIED IN EITHER DIRECTION AT A RATE OF 1 POUND PER SECOND.

<table>
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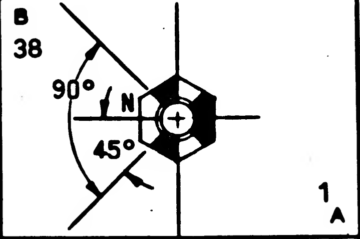
<tr><td>-1</td><td>
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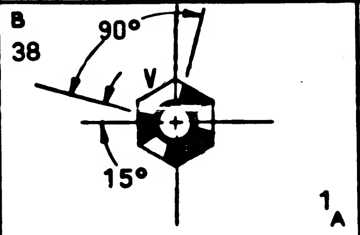
<tr><td>-2</td><td>
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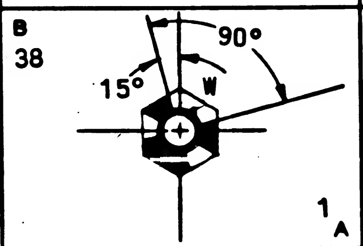
<tr><td>-3</td><td>
</td><td>38</td></tr>
</table>

MATES WITH 1010820 OR 1897169

NOTES:

4. SHADED PORTION INDICATES HIGH POINTS ON HEX.
5. DIMENSIONAL OUTLINE DRAWING SHOWS "N" POLARIZATION.

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY	USED ON

APPLICATION

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING
MATERIAL
HEAT TREATMENT
FINAL FINISH

M I T
INSTRUMENTATION LAB
CAMBRIDGE, MASS
DWG. NO. Contract NAS 9-497

DRAWN Toro DATE 30 Oct 64
CHECKED Ed Foster 30 OCT 64
APPROVAL Amelson Lewis 2 Nov 64
APPROVAL J. M. Watson 1 DEC 64
NASA APPROVAL R. C. McFizzel 2/5
MIT APPROVAL L. Hazel 12/13/64

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

CONNECTOR, RECEPTACLE, ELECTRICAL 38
NO. 22 SOCKET CONTACTS

SPECIFICATION CONTROL DRAWING

CODE IDENT NO.	SIZE	NASA DRAWING NO.
	C	1897170
SCALE	WT	SHEET 2 OF 2

INCHES
0 1 2
PHOTOGRAPHIC SCALE ONLY

1897171 A

REVISIONS 14867			
SYM	DESCRIPTION	DATE	APPROVAL
A	REVISED PER TDRR 14873 SHEET 4 ADDED	28 DEC 64	

NOTICE — WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER, AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REQUIREMENTS:

1. GENERAL:
   - A. INTERPRET DRAWING SYMBOLS, ABBREVIATIONS AND REFERENCE DESIGNATIONS IN ACCORDANCE WITH GOVERNMENT STANDARDS PRESCRIBED IN MIL-D-70327.
   - B. SUPPLIER SHALL CONFORM TO THE QUALITY ASSURANCE PROVISIONS SPECIFIED IN ND 1015404, CLASS 3.

   - D. SOCKET CONTACTS ARE TO BE PROCURED SEPARATELY PER 1010738.

2. INSPECTION AND ACCEPTANCE:
   - A. MECHANICAL REQUIREMENTS:
     - (1) MATERIAL:
       - (a) BODY: DIALLYLPHTHALATE PER MIL-M-14, SDG-F TAN COLOR.
       - (b) HARDWARE:
         - POLARIZING BOSS: ALUMINUM ALLOY GRADE 7075T6 PER QQ-A-277
         - SPACER: DIALLYLPHTHALATE PER MIL-M-14 TYPE SDG-F
         - RETAINING RING: MS-16632-28 PER MILITARY SPECIFICATION MIL-R-21248
         - JACKSCREW OR GUIDE PIN AND METAL INSERT CRES 303 OR 303 Se COND A OR B PER QQ-S-763.
     - (2) FINISH:
       - (a) HARDWARE:
         - POLARIZING BOSS: GRAY ANODIZE PER SPECIFICATION MIL-A-8625 TYPE 1
         - JACKSCREW OR GUIDE PIN AND METAL INSERT: PASSIVATE PER MIL-S-5002. JACKSCREW IS LUBRICATED.

         POLARIZATION: PER TABLE I.
     - (3) DIMENSIONS: AS PER DRAWING
     - (4) MARKING:
       - (a) PIECEMARKING: UNITS SHALL BE MARKED IN ACCORDANCE WITH ND 1002019 WITH THE MANUFACTURER'S NAME AND/OR SYMBOL, NASA PART NUMBER, AND REVISION LETTER, MANUFACTURER'S LOT OR SERIAL NUMBER TRACEABLE TO DATE OF MANUFACTURE. THE MANUFACTURER'S PART NUMBER MAY APPEAR ON THE PART.
       - (b) PACKAGE: INTERNAL INDIVIDUAL OR COLLECTIVE PACKAGES AND EXTERNAL PACKAGING SHALL BE MARKED WITH THE FOLLOWING INFORMATION:
         - SUPPLIER'S NAME
         - NASA PART NUMBER AND REVISION LETTER
         - SUPPLIER'S LOT OR SERIAL NUMBER
       - (c) MANUFACTURER'S PART NUMBER MAY APPEAR ON THE PACKAGE.

PROCURE ONLY FROM APPROVED SOURCES LISTED IN ND 1002034 FOR THIS DRAWING

3. DESIGN REQUIREMENTS:
   - A. ELECTRICAL REQUIREMENTS WITH CONTACTS INSTALLED.
     - (1) INSULATION RESISTANCE: 2000 MEGOHMS MINIMUM AT 150°F MEASURED BETWEEN ANY TWO ADJACENT CONTACTS AND BETWEEN THE SHELL OR HARDWARE AND ANY ADJACENT CONTACT WHEN TESTED IN ACCORDANCE WITH MIL-STD-202 METHOD 302, CONDITION B.
     - (2) DIELECTRIC STRENGTH: SEA LEVEL - NO EVIDENCE OF BREAKDOWN OR FLASHOVER WHEN TESTED AT 1500 VRMS. 90,000 TO 130,000 FT. - NO EVIDENCE OF BREAKDOWN OR FLASHOVER WHEN 250 VRMS APPLIED BETWEEN ANY PAIR OF CONTACTS AND BETWEEN THE HARDWARE AND ANY CONTACT WHEN TESTED IN ACCORDANCE WITH MIL-STD-202, METHOD 301.
     - (3) VOLTAGE RATINGS (CONTACTS INSTALLED):

	VOLTS DC	VOLTS AC RMS
SEA LEVEL	490	350
10,000 FT.	390	280
60,000 FT.	140	100

   - B. MECHANICAL:
     - (1) CONTACT RETENTION FORCE:
       - a. WHEN CONTACTS ARE PROPERLY INSTALLED IN THEIR USING CONNECTOR, THEY SHALL BE CAPABLE OF SUPPORTING (WITHOUT DAMAGE) A MIN OF 15 LBS. AXIAL LOAD APPLIED IN EITHER DIRECTION.
     - (2) MATING CONNECTOR: 1010823 OR 1897172.

A	A	A	A
SHEET 1	SHEET 2	SHEET 3	SHEET 4
REVISION STATUS OF SHEETS			

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.
LIST OF MATERIALS			

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APPLICATION	

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± DECIMALS ±.010 ±.03 ANGLES ±
DO NOT SCALE THIS DRAWING
MATERIAL: SEE REQUIREMENTS
HEAT TREATMENT: NONE
FINAL FINISH: SEE REQUIREMENTS

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CONNECTOR, RECEPTACLE, ELECTRICAL
(FOR NO. 22 SOCKET CONTACTS)

SPECIFICATION CONTROL DRAWING

CODE IDENT NO. | SIZE C | NASA DRAWING NO. 1897171
SCALE NONE | WT | SHEET 1 OF 4

1897171

1897171	A

REVISIONS 14267			
SYM	DESCRIPTION	DATE	APPROVAL
A	REVISED PER TDRR 14873	28 DEC 64	

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NOTES:

1. SHADED AREAS INDICATE HIGH PORTIONS OF POLARIZING DEVICE.
LARGE NOTCH IS ADJACENT TO POLARIZATION LETTER REQUIRED.
POLARIZATION BOSS SHOWN IN "N" POSITION.

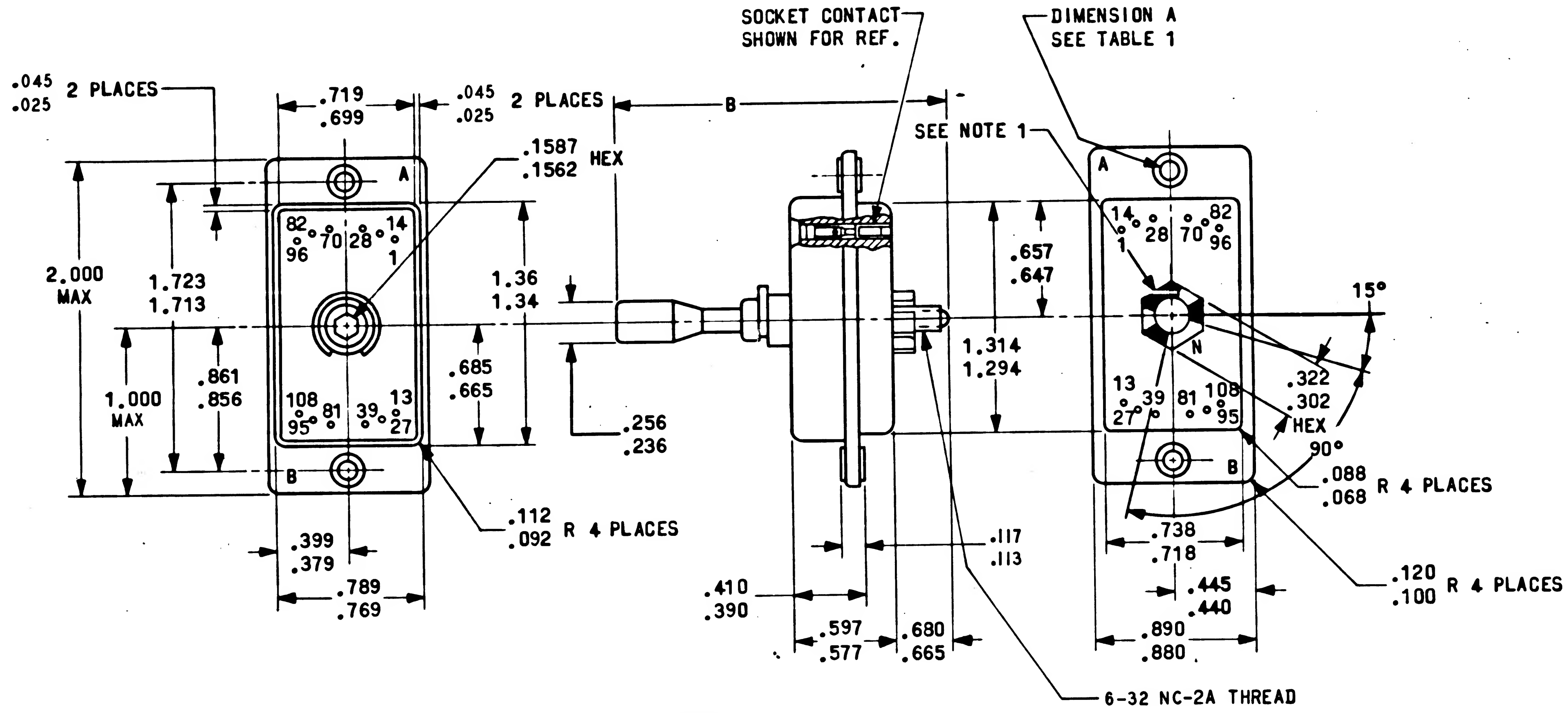

FIGURE 1

THE PART NUMBER IS THE DRAWING NUMBER PLUS THE APPLICABLE DASH NUMBER.

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING
MATERIAL
HEAT TREATMENT
FINAL FINISH

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(FOR NO. 22 SOCKET CONTACTS)

SPECIFICATION CONTROL DRAWING

CODE IDENT NO.	SIZE	NASA DRAWING NO.
	C	1897171
SCALE NONE	WT	SHEET 2 OF 4

1897171

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1897171	A

REVISIONS 14867

SYM	DESCRIPTION	DATE	APPROVAL
A	REVISED PER TDRR 14873	28 DEC 64	WE

(REFERENCE)

	JACKSCREW	RACK & PANEL HARDWARE
A (FULLY ENGAGED)	.216 ± .012	.216 ± .012
B (PIN DISENGAGED)	.338 ± .038	.338 ± .012
C (HEX DISENGAGED)	.482 ± .012	.482 ± .012
D (FULLY DISENGAGED)	1.007 ± .036	.768 ± .039

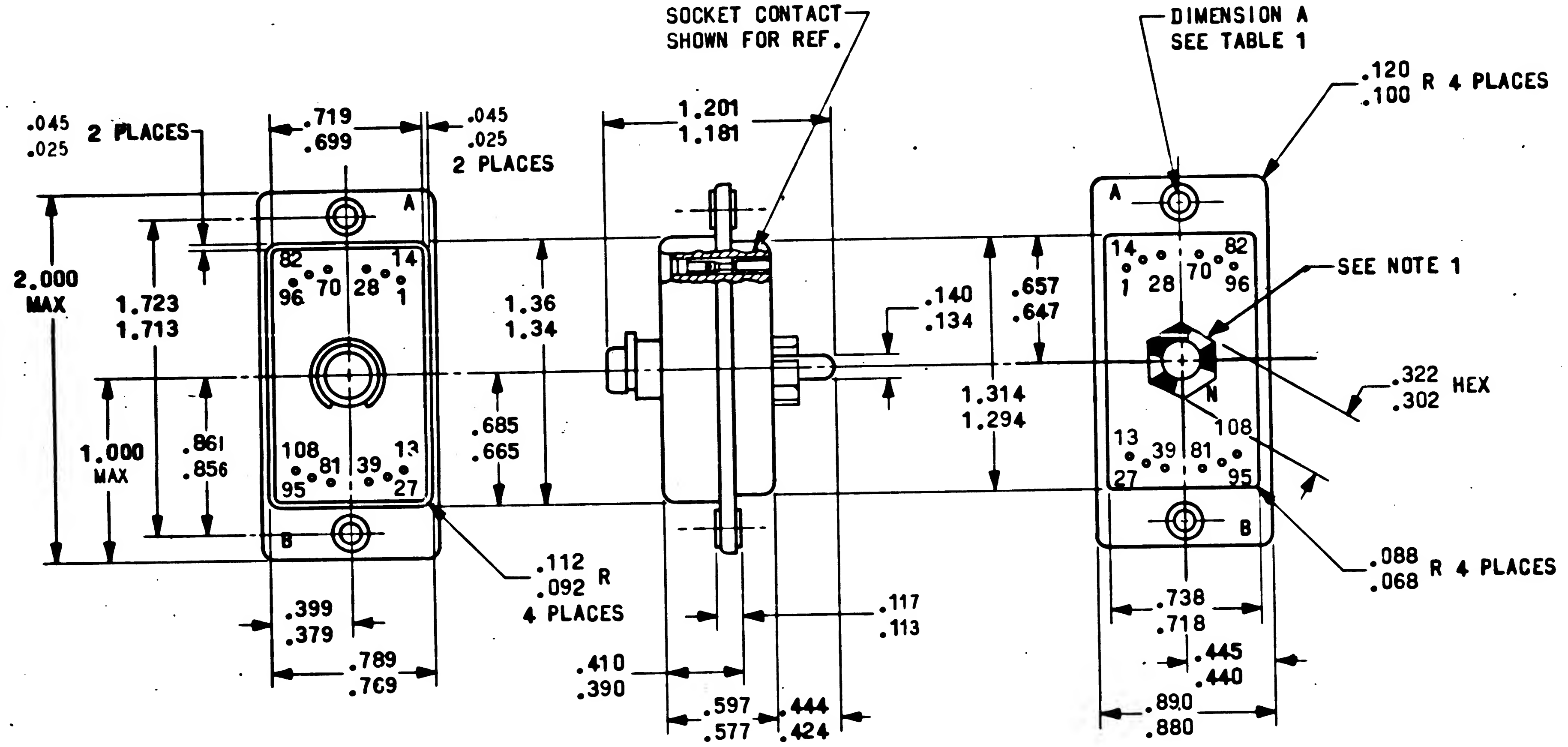
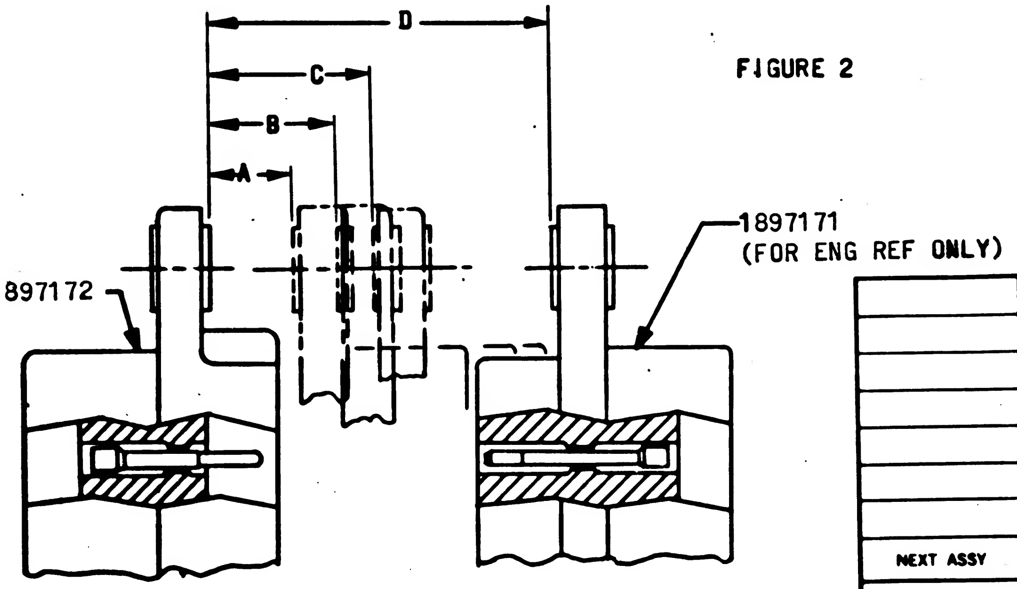


FIGURE 2



NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING
MATERIAL
HEAT TREATMENT
FINAL FINISH

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

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SPECIFICATION CONTROL DRAWING

CODE IDENT NO. SIZE C NASA DRAWING NO. 1897171
SCALE NONE WT SHEET 3 OF 4

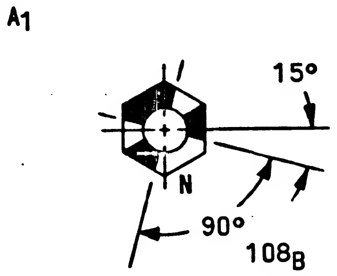
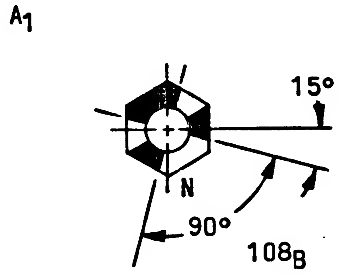
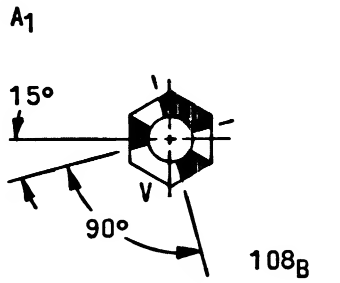
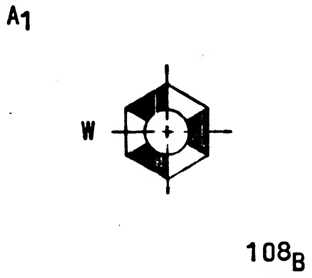
1897171

1897171 A

REVISIONS			
SYM	DESCRIPTION	DATE	APPROVAL
A	THIS SHEET ADDED PER TDRR 14873	28 DEC 64	W.D.

NOTICE — WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER, AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

TABLE I

NASA DASH NUMBER	FIG. NO.	POLARIZATION POSITION	DIM A	SCREWLOCK DIM B	APPLICATION
-1	1		.161 .151	2.083 2.063	JACKSCREW
-3			.131 .121	2.828 2.808	
-2	2		.161 .151	NA	RACK & PANEL
-4	1		.131 .121	2.828 2.808	JACKSCREW
-5	1		.161 .151	2.083 2.063	JACKSCREW

Ⓐ **THIS SHEET ADDED**

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY	USED ON

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING
MATERIAL
HEAT TREATMENT
FINAL FINISH

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DWG. NO. CONTRACT

DRAWN Spinne DATE 28 DEC 64
CHECKED W. Diehl 30 Dec '64
APPROVAL Johnson Lewis 4 JAN 65
APPROVAL J. M. Watson 1-19-65
NASA APPROVAL W J Kline 1-19-65
MIT APPROVAL 19 Jan 65

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SPECIFICATION CONTROL DRAWING

CODE IDENT NO. SIZE C NASA DRAWING NO. 1897171
SCALE WT SHEET 4 OF 4

1897171

REVISIONS 14867

SYM	DESCRIPTION	DATE	APPROVAL

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REQUIREMENTS:

1. GENERAL:
   - A. INTERPRET DRAWING SYMBOLS, ABBREVIATIONS AND REFERENCE DESIGNATIONS IN ACCORDANCE WITH GOVERNMENT STANDARDS PRESCRIBED IN MIL-D-70327.
   - B. SUPPLIER SHALL CONFORM TO THE QUALITY ASSURANCE PROVISIONS SPECIFIED IN ND 1015404, CLASS 2.
   - C. UNITS SHALL BE CAPABLE OF MEETING ALL QUALIFICATION REQUIREMENTS SPECIFIED IN ND 1002052.
   - D. SOCKET CONTACTS ARE TO BE PROCURED SEPARATELY PER 1010738.

2. INSPECTION AND ACCEPTANCE:
   - A. MECHANICAL REQUIREMENTS:
     - (1) MATERIAL:
       - (a) BODY: DIALLYLPHTHALATE PER MIL-M-14, SDG-F TAN COLOR.
       - (b) HARDWARE:
         - POLARIZING BOSS: ALUMINUM ALLOY GRADE 7075T6 PER QQ-A-277
         - SPACER: DIALLYLPHTHALATE PER MIL-M-14 TYPE SDG-F
         - RETAINING RING: MS-16632-28 PER MILITARY SPECIFICATION MIL-R-21248
         - JACKSCREW OR GUIDE PIN AND METAL INSERT CRES 303 OR 303 Se COND A OR B PER QQ-S-763.
     - (2) FINISH:
       - (a) HARDWARE:
         - POLARIZING BOSS: GRAY ANODIZE PER SPECIFICATION MIL-A-8625 TYPE 1
         - JACKSCREW OR GUIDE PIN AND METAL INSERT: PASSIVATE PER MIL-F-14072 FINISH NO. E-300. JACKSCREW IS LUBRICATED.
         - POLARIZATION: NORMAL
     - (3) DIMENSIONS: AS PER DRAWING
     - (4) MARKING:
       - (a) PIECEMARKING: UNITS SHALL BE MARKED IN ACCORDANCE WITH ND 1002019 WITH THE MANUFACTURER'S NAME AND/OR SYMBOL, NASA PART NUMBER, AND REVISION LETTER, MANUFACTURER'S LOT OR SERIAL NUMBER TRACEABLE TO DATE OF MANUFACTURE. THE MANUFACTURER'S PART NUMBER MAY APPEAR ON THE PART.
       - (b) PACKAGE: INTERNAL INDIVIDUAL OR COLLECTIVE PACKAGES AND EXTERNAL PACKAGING SHALL BE MARKED WITH THE FOLLOWING INFORMATION:
         - SUPPLIER'S NAME
         - NASA PART NUMBER AND REVISION LETTER
         - SUPPLIER'S LOT OR SERIAL NUMBER
       - (c) MANUFACTURER'S PART NUMBER MAY APPEAR ON THE PACKAGE.

PROCURE ONLY FROM APPROVED SOURCES LISTED IN ND 1002034 FOR THIS DRAWING

3. DESIGN REQUIREMENTS:
   - A. ELECTRICAL REQUIREMENTS WITH CONTACTS INSTALLED.
     - (1) INSULATION RESISTANCE: 2000 MEGOHMS MINIMUM AT 150°F MEASURED BETWEEN ANY TWO ADJACENT CONTACTS AND BETWEEN THE SHELL OR HARDWARE AND ANY ADJACENT CONTACT WHEN TESTED IN ACCORDANCE WITH MIL-STD-202 METHOD 302, CONDITION C.
     - (2) DIELECTRIC STRENGTH: SEA LEVEL - NO EVIDENCE OF BREAKDOWN OR FLASHOVER WHEN TESTED AT 1500 VRMS. 90,000 TO 130,000 FT. - NO EVIDENCE OF BREAKDOWN OR FLASHOVER WHEN 250 VRMS APPLIED BETWEEN ANY PAIR OF CONTACTS AND BETWEEN THE HARDWARE AND ANY CONTACT WHEN TESTED IN ACCORDANCE WITH MIL-STD-202, METHOD 301.
     - (3) VOLTAGE RATINGS (CONTACTS INSTALLED):

	VOLTS DC	VOLTS AC RMS
SEA LEVEL	490	350
10,000 FT.	390	280
60,000 FT.	140	100

   - B. MECHANICAL:
     - (1) CONTACT RETENTION FORCE:
       - a. WHEN CONTACTS ARE PROPERLY INSTALLED IN THEIR USING CONNECTOR, THEY SHALL BE CAPABLE OF SUPPORTING (WITHOUT DAMAGE) A MIN OF 15 LBS. AXIAL LOAD APPLIED IN EITHER DIRECTION.

SHEET 1	SHEET 2	SHEET 3
REVISION STATUS OF SHEETS		

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± DECIMALS ±.010 ±.03 ANGLES ±
DO NOT SCALE THIS DRAWING
MATERIAL SEE REQUIREMENTS
HEAT TREATMENT NONE
FINAL FINISH SEE REQUIREMENTS

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APPROVAL 30 OCT 64
APPROVAL J. M. Watson 12/15/64
NASA APPROVAL
MIT APPROVAL D Hall 12/15/64

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(FOR NO. 22 SOCKET CONTACTS)

SPECIFICATION CONTROL DRAWING

CODE IDENT NO.
SIZE C
NASA DRAWING NO. 1897171
SCALE NONE
WT
SHEET 1 OF 3

INCHES
0 1 2
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1897171

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SYM	DESCRIPTION	DATE	APPROVAL

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NOTES:

1. SHADED AREAS INDICATE HIGH PORTIONS OF POLARIZING DEVICE.
   LARGE NOTCH IS ADJACENT TO POLARIZATION LETTER REQUIRED.
   POLARIZATION BOSS SHOWN IN "N" POSITION.

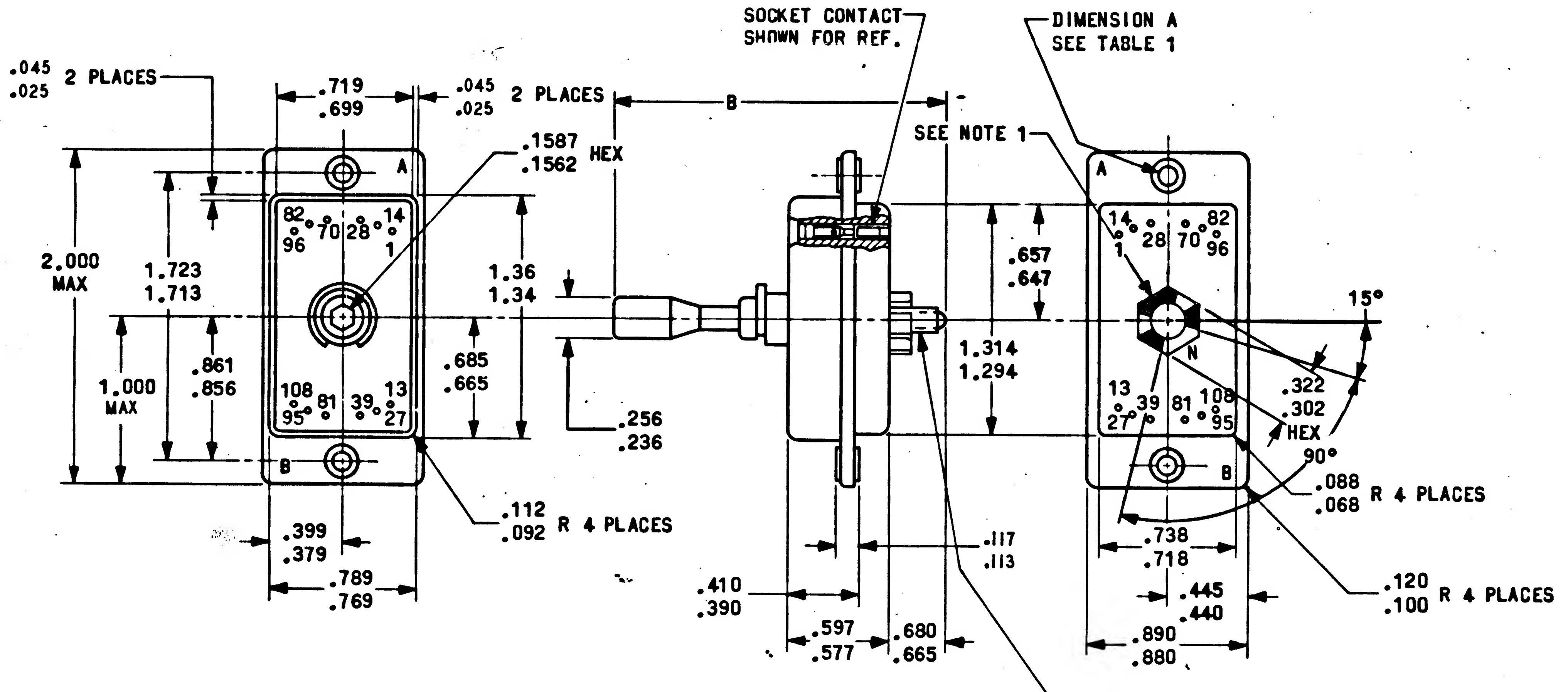

FIGURE 1 1010822-1 AND -3

THE PART NUMBER IS THE DRAWING NUMBER PLUS THE APPLICABLE DASH NUMBER.

TABLE I

DASH NO.	DRAWING FIGURE NO.	DIM A	SCREWLOCK DIM B	APPLICATION
-1	1	.161 .151	2.083 2.063	JACKSCREW
-2	2	.161 .151	NA	RACK & PANEL
-3	1	.130 .120	2.828 2.808	JACKSCREW

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± — DECIMALS ± — ANGLES ± —
DO NOT SCALE THIS DRAWING
MATERIAL
HEAT TREATMENT
FINAL FINISH

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SPECIFICATION CONTROL DRAWING

CODE IDENT NO.
SIZE C
NASA DRAWING NO. 1897171
SCALE NONE
WT
SHEET 2 OF 3

INCHES
0 1 2
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1897171

REVISIONS 14867			
SYM	DESCRIPTION	DATE	APPROVAL

(REFERENCE)

	JACKSCREW	RACK & PANEL HARDWARE
A (FULLY ENGAGED)	.216 ± .012	
B (PIN DISENGAGED)	.338 ± .038	
C (HEX DISENGAGED)	.482 ± .012	
D (FULLY DISENGAGED)	1.029 ± .036	.790 ± .038

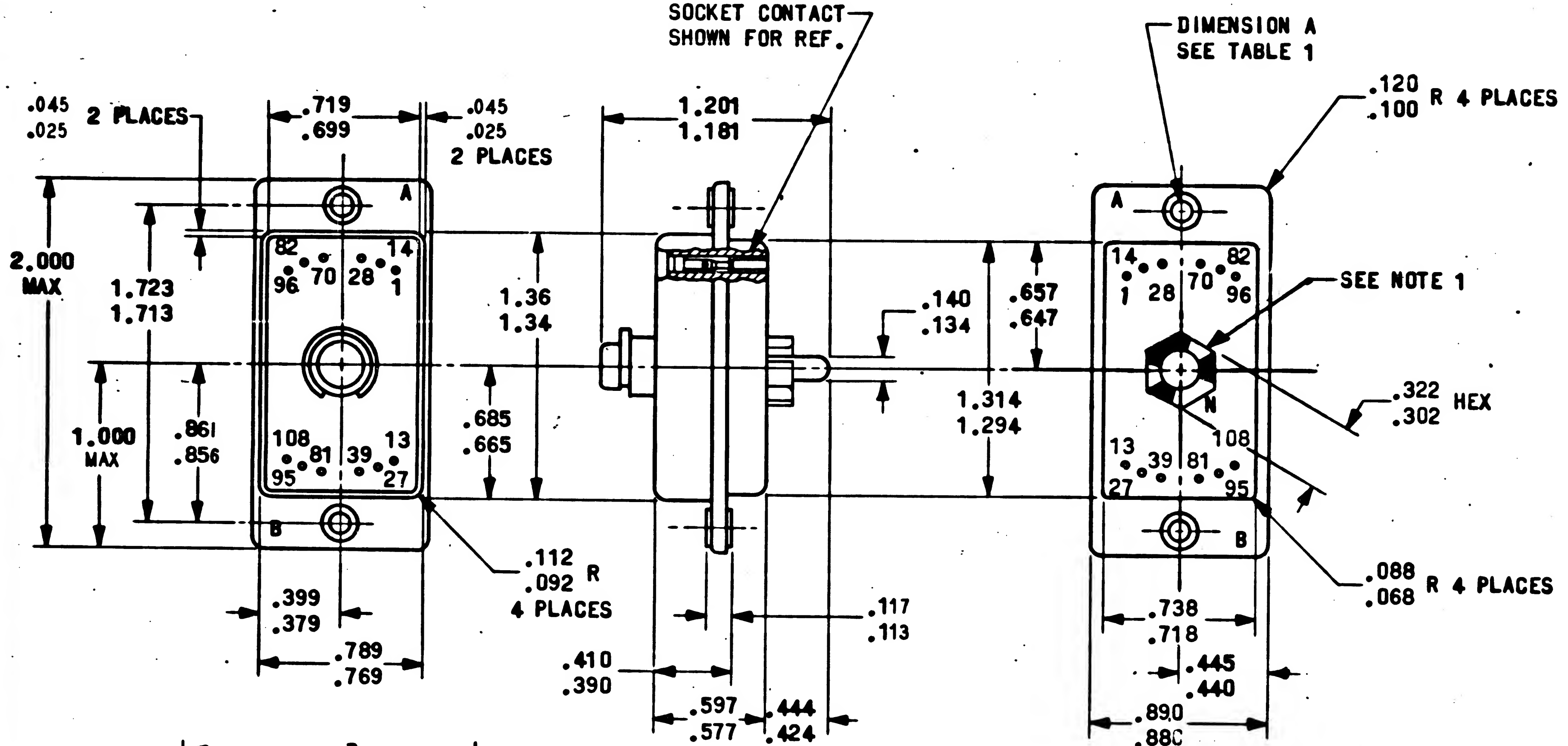
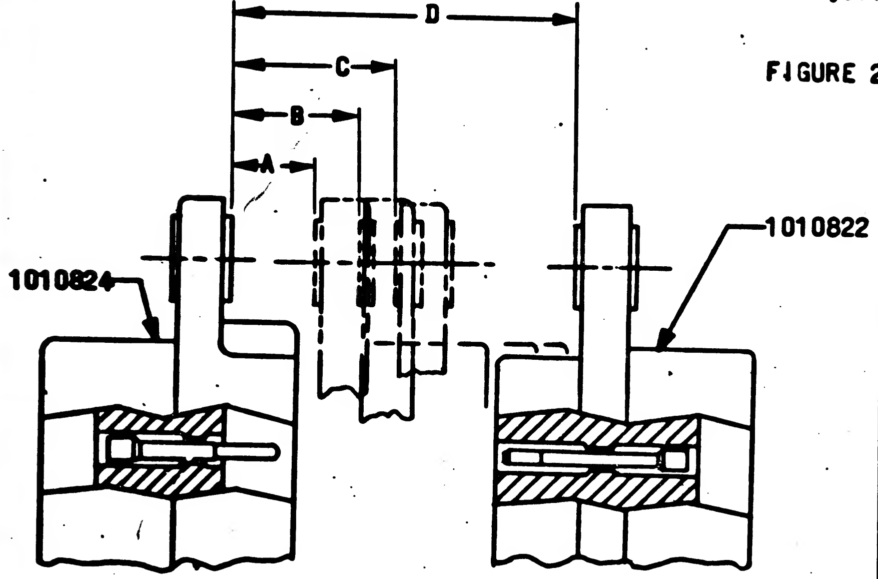


FIGURE 2 1010822-2



MASTER

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING
MATERIAL
HEAT TREATMENT
FINAL FINISH

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.

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SPECIFICATION CONTROL DRAWING

CODE IDENT NO.
SIZE C
NASA DRAWING NO. 1897171
SCALE NONE
WT
SHEET 3 OF 3

INCHES
0 1 2
PHOTOGRAPHIC SCALE ONLY

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1897172

REVISIONS 14867

SYM	DESCRIPTION	DATE	APPROVAL

REQUIREMENTS:

1. GENERAL:
   - A. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327.
   - B. SUPPLIER SHALL CONFORM TO THE QUALITY ASSURANCE PROVISIONS SPECIFIED IN ND 1015404, CLASS 2.
   - C. UNITS SHALL BE CAPABLE OF MEETING ALL QUALIFICATION REQUIREMENTS SPECIFIED IN ND 1002052.
   - D. PIN CONTACTS ARE TO BE PROCURED SEPARATELY PER 1010738.

2. INSPECTION AND ACCEPTANCE:
   - A. MECHANICAL REQUIREMENTS:
     - (1) MATERIAL:
       - (a) BODY: DIALLYLPHTHALATE PER MIL-M-14, TYPE SDG-F (TAN COLOR).
       - (b) HARDWARE:
         - POLARIZING BOSS: ALUMINUM ALLOY GRADE 7075T6 PER QQ-A-277-1.
         - SPACER: DIALLYLPHTHALATE, PER MIL-M-14, TYPE SDG-F (TAN COLOR).
         - METAL INSERT: CORROSION RESISTANT STEEL, CLASS 303 OR 303 S_e, CONDITION A OR B PER QQ-S-763.
         - RETAINING RING: MS-16632-28 PER MIL-R-21248.
     - (2) FINISH:
       - (a) HARDWARE:
         - POLARIZING BOSS: GRAY ANODIZE PER MIL-A-8625, TYPE 1
         - METAL INSERT: PASSIVATE PER MIL-F-14072 FINISH NO. E-300.
     - (3) FOR POLARIZATION: NORMAL
     - (4) DIMENSIONS: AS PER DRAWING
     - (5) MARKING:
       - (a) PIECEMARKING: UNITS SHALL BE MARKED IN ACCORDANCE WITH ND 1002019 WITH THE MANUFACTURER'S NAME AND/OR SYMBOL, NASA PART NUMBER, AND REVISION LETTER, MANUFACTURER'S LOT OR SERIAL NUMBER TRACEABLE TO DATE OF MANUFACTURE. THE MANUFACTURER'S PART NUMBER MAY APPEAR ON THE PART.
       - (b) PACKAGE: INTERNAL INDIVIDUAL OR COLLECTIVE PACKAGES AND EXTERNAL PACKAGING SHALL BE MARKED WITH THE FOLLOWING INFORMATION:
         - SUPPLIER'S NAME
         - NASA PART NUMBER AND REVISION LETTER
         - SUPPLIER'S LOT OR SERIAL NUMBER
       - (c) MANUFACTURER'S PART NUMBER MAY APPEAR ON THE PACKAGE.

PROCURE ONLY FROM APPROVED SOURCES LISTED ON ND 1002034 FOR THIS DRAWING.

SHEET 1	SHEET 2	SHEET 3

REVISION STATUS OF SHEETS

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY	USED ON

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± DECIMALS ±.010 ±.03 ANGLES ±
DO NOT SCALE THIS DRAWING

MATERIAL
SEE REQUIREMENTS

HEAT TREATMENT
NONE

FINAL FINISH
SEE REQUIREMENTS

MIT
INSTRUMENTATION LAB
CAMBRIDGE MASS
DWG NO Contract NAS 9-497

DRAWN M. Grabner DATE 29-OCT-64
CHECKED Ed Foster 30 OCT 64
APPROVAL [illegible] 30OCT64
APPROVAL J. M. Watson 1 DEC. 64
NASA APPROVAL [illegible]
MIT APPROVAL [illegible] 12/1/64

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

CONNECTOR, PLUG, ELECTRICAL

SPECIFICATION CONTROL DRAWING

CODE IDENT NO.
SIZE C
NASA DRAWING NO. 1897172
SCALE NONE
WT
SHEET 1 OF 3

INCHES
0 1 2
PHOTOGRAPHIC SCALE ONLY

NOTICE — WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REVISIONS 14867			
SYM	DESCRIPTION	DATE	APPROVAL

3. DESIGN REQUIREMENTS:

A. ELECTRICAL REQUIREMENTS WITH CONTACTS INSTALLED:

(1) INSULATION RESISTANCE: 2000 MEGOHMS MINIMUM (500 VDC) AT 150°F MEASURED BETWEEN ANY TWO ADJACENT CONTACTS AND BETWEEN THE SHELL OR HARDWARE AND ANY ADJACENT CONTACT WHEN TESTED IN ACCORDANCE WITH MIL-STD-202 METHOD 302, CONDITION C.

(2) DIELECTRIC STRENGTH: SEA LEVEL - NO EVIDENCE OF BREAKDOWN OR FLASHOVER WHEN TESTED AT 600 VRMS. 90,000 TO 130,000 FT. - NO EVIDENCE OF BREAKDOWN OR FLASHOVER WHEN 250 VRMS APPLIED BETWEEN ANY PAIR OF CONTACTS AND BETWEEN THE HARDWARE AND ANY CONTACT WHEN TESTED IN ACCORDANCE WITH MIL-STD-202, METHOD 301.

(3) VOLTAGE RATINGS:

	VOLTS DC	VOLTS AC RMS
SEA LEVEL	490	350
10,000 FT.	390	280
60,000 FT.	140	100

WITHSTANDING VOLTAGE (SEA LEVEL) 1500 VOLTS RMS 60 CPS WITHOUT FLASHOVER.

B. MECHANICAL:

(1) CONTACT RETENTION FORCE

(a) WHEN CONTACTS ARE PROPERLY INSTALLED IN THEIR USING CONNECTOR, THEY ARE CAPABLE OF WITHSTANDING (WITHOUT DAMAGE) A MIN OF 15 LBS. AXIAL LOAD APPLIED IN EITHER DIRECTION AFTER NOT LESS THAN 10 INSERTIONS AND WITHDRAWALS.

NOTES:

1. SHADED AREAS INDICATE HIGH PORTION OF POLARIZING DEVICE.
2. LARGE NOTCH IS ADJACENT TO POLARIZATION POSITION LETTER REQUESTED.
3. DASH 1 MATES WITH 1010822-1 AND DASH 2 MATES WITH 1010822-2

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIN NO

LIST OF MATERIALS

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING
MATERIAL
HEAT TREATMENT
FINAL FINISH

MIT
INSTRUMENTATION LAB
CAMBRIDGE MASS
DWG NO Contract NAS 9-497

DRAWN M. Graber DATE 29-OCT 64
CHECKED Ed Foster 30 OCT64
APPROVAL 30OCT64
APPROVAL J M Watson 1DEC64
NASA APPROVAL 12/15
MIT APPROVAL 12/15/67

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

CONNECTOR, PLUG ELECTRICAL

SPECIFICATION CONTROL DRAWING

CODE IDENT NO.
SIZE C
NASA DRAWING NO. 1897172
SCALE
WT
SHEET 2 OF 3

INCHES
0 1 2
PHOTOGRAPHIC SCALE ONLY

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1897172

REVISIONS 14867

SYM	DESCRIPTION	DATE	APPROVAL

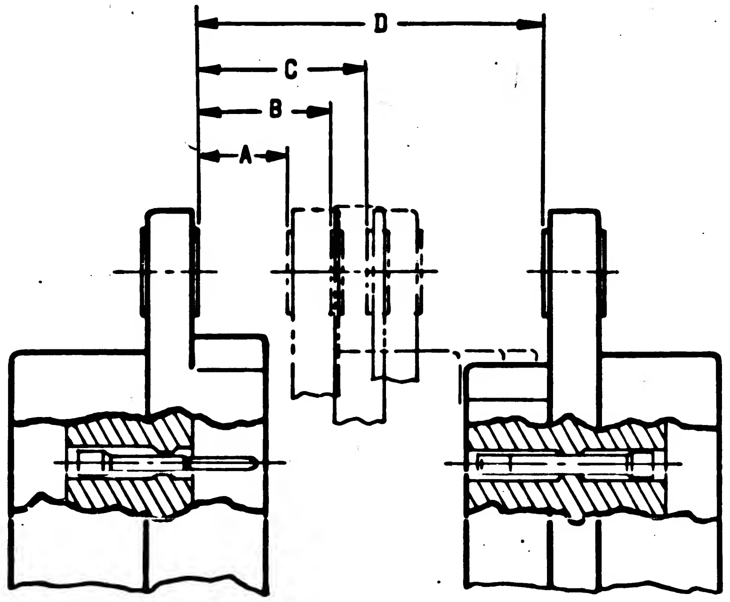
	JACKSCREW	RACK & PANEL HARDWARE
A (FULLY ENGAGED)	.216±.012	
B (PIN DISENGAGED)	.338±.038	
C (HEX DISENGAGED)	.482±.012	
D (FULLY DISENGAGED)	1.029±.036	.790±.038

TABLE I

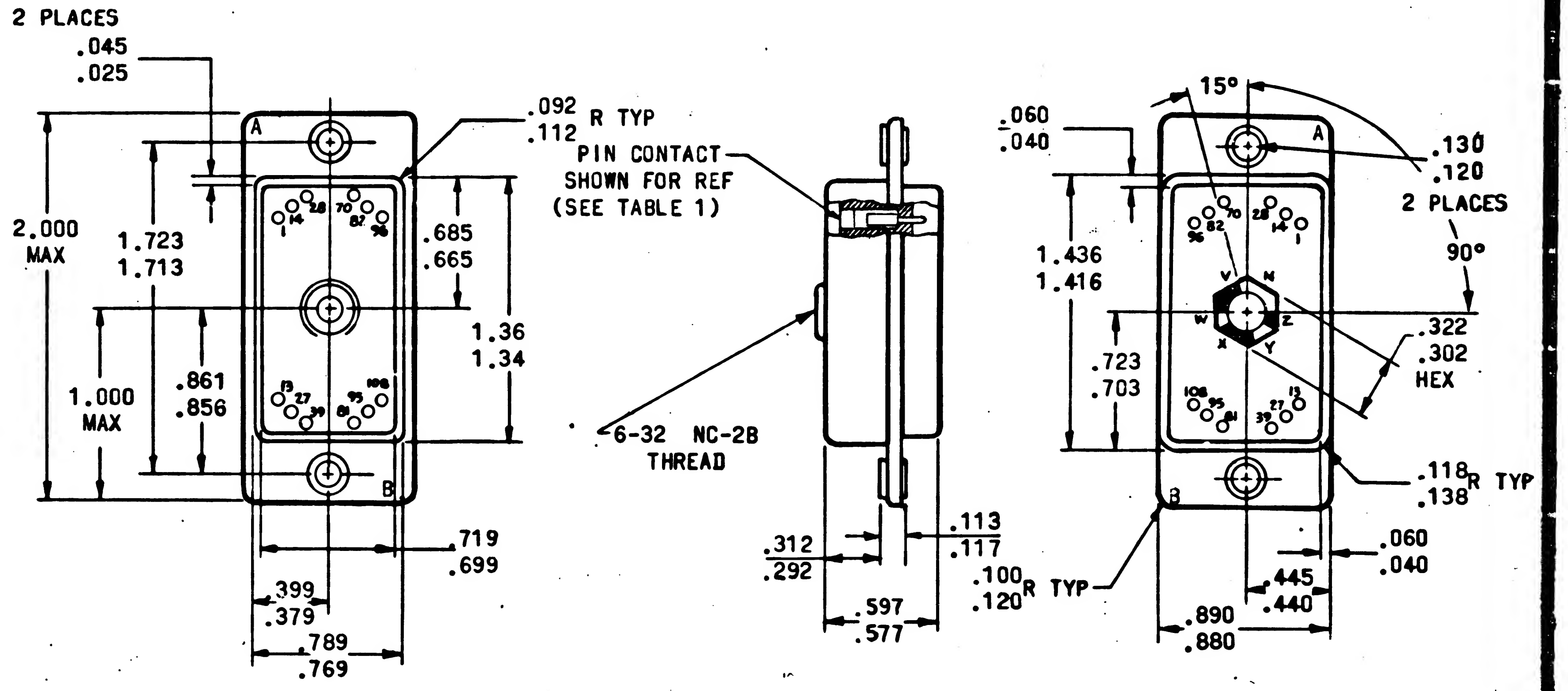
NASA DASH NUMBER	APPLICATION
-1	JACKSCREW
-2	RACK AND PANEL

SEE NOTE 3

THE PART NUMBER IS THE DRAWING NUMBER PLUS THE APPLICABLE DASH NUMBER.



FOR ENG REF ONLY



QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING
MATERIAL
HEAT TREATMENT
FINAL FINISH

MIT
INSTRUMENTATION LAB
CAMBRIDGE MASS
DWG NO Contract NAS 9-497
DRAWN M. Grebner DATE 29-OCT-64
CHECKED Ed Foster 30 OCT 64
APPROVAL
APPROVAL J. M. Watson 1Dec64
NASA APPROVAL A. C. [illegible] 12/8
MIT APPROVAL D. Hoag 12/15/64

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

CONNECTOR, PLUG, ELECTRICAL

SPECIFICATION CONTROL DRAWING

CODE IDENT NO.
SIZE C
NASA DRAWING NO. 1897172
SCALE
WT
SHEET 3 OF 3

INCHES
0 1 2
PHOTOGRAPHIC SCALE ONLY

1897173 A

SYM	DESCRIPTION	DATE	APPROVAL
A	REVISED PER TDRR-14868 SHEET 3 ADDED	30-DEC-64	B.

REVISIONS 14867

NOTICE — WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER, AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS, OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REQUIREMENTS:

1. **GENERAL:**
   - A. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327.
   - B. SUPPLIER SHALL CONFORM TO THE QUALITY ASSURANCE PROVISIONS SPECIFIED IN NASA DOCUMENT ND 1015404, CLASS 3.
   - C.
   - D. CONNECTOR IS DESIGNED TO USE SOCKET CONTACTS PER ND 1010738.

2. **INSPECTION AND ACCEPTANCE:**
   - A. **MECHANICAL PROPERTIES.**
     - (1) MATERIAL:
       - (a) BODY: DIALLYLPHTHALATE PER MIL-M-14, TYPE SDG-F (TAN COLOR)
       - (b) HARDWARE: ALIGNMENT HARDWARE ALUMINUM ALLOY GRADE 7075T6 PER QQ-A-277-1 GRAY ANODIZE PER MIL-A-8625 TYPE I.
     - (2) MARKING: UNITS SHALL BE MARKED IN ACCORDANCE WITH ND 1002019 WITH THE MANUFACTURER'S NAME AND/OR SYMBOL, NASA DRAWING NUMBER, DASH NUMBER AND REVISION LETTER, LOT OR SERIAL NUMBER TRACEABLE TO DATE OF MANUFACTURE. THE MANUFACTURER'S PART NUMBER MAY APPEAR ON THE PART OR PACKAGE.
     - (3) DIMENSIONS: PER DRAWING
     - (4) POLARIZATION: PER TABLE I
   - B. ELECTRICAL CHARACTERISTICS: (CONTACTS INSTALLED)
     - (1) INSULATION RESISTANCE: 2000 MEGOHMS MINIMUM AT 150°F MEASURED BETWEEN ANY TWO ADJACENT CONTACTS AND BETWEEN THE SHELL OR HARDWARE AND ANY CONTACT.
     - (2) DIELECTRIC STRENGTH: SEA LEVEL - NO EVIDENCE OF BREAKDOWN OR FLASHOVER WHEN TESTED AT 1500 VRMS. 90,000 TO 130,000 FT - NO EVIDENCE OF BREAKDOWN OR FLASHOVER WHEN 250 VRMS APPLIED BETWEEN ANY PAIR OF CONTACTS AND BETWEEN THE HARDWARE AND ANY CONTACT.
     - (3) VOLTAGE RATINGS:

	DC VOLTS	AC VOLTS RMS
SEA LEVEL	490	350
10,000 FEET	390	280
60,000 FEET	140	100

     - (4) WITHSTANDING VOLTAGE; (SEA LEVEL) 1500 VOLTS RMS 60 CPS WITHOUT FLASHOVER.

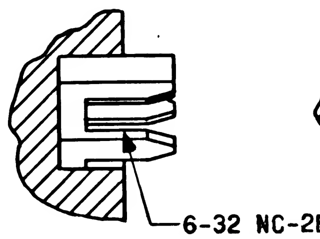


FIGURE 1

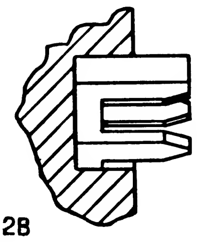
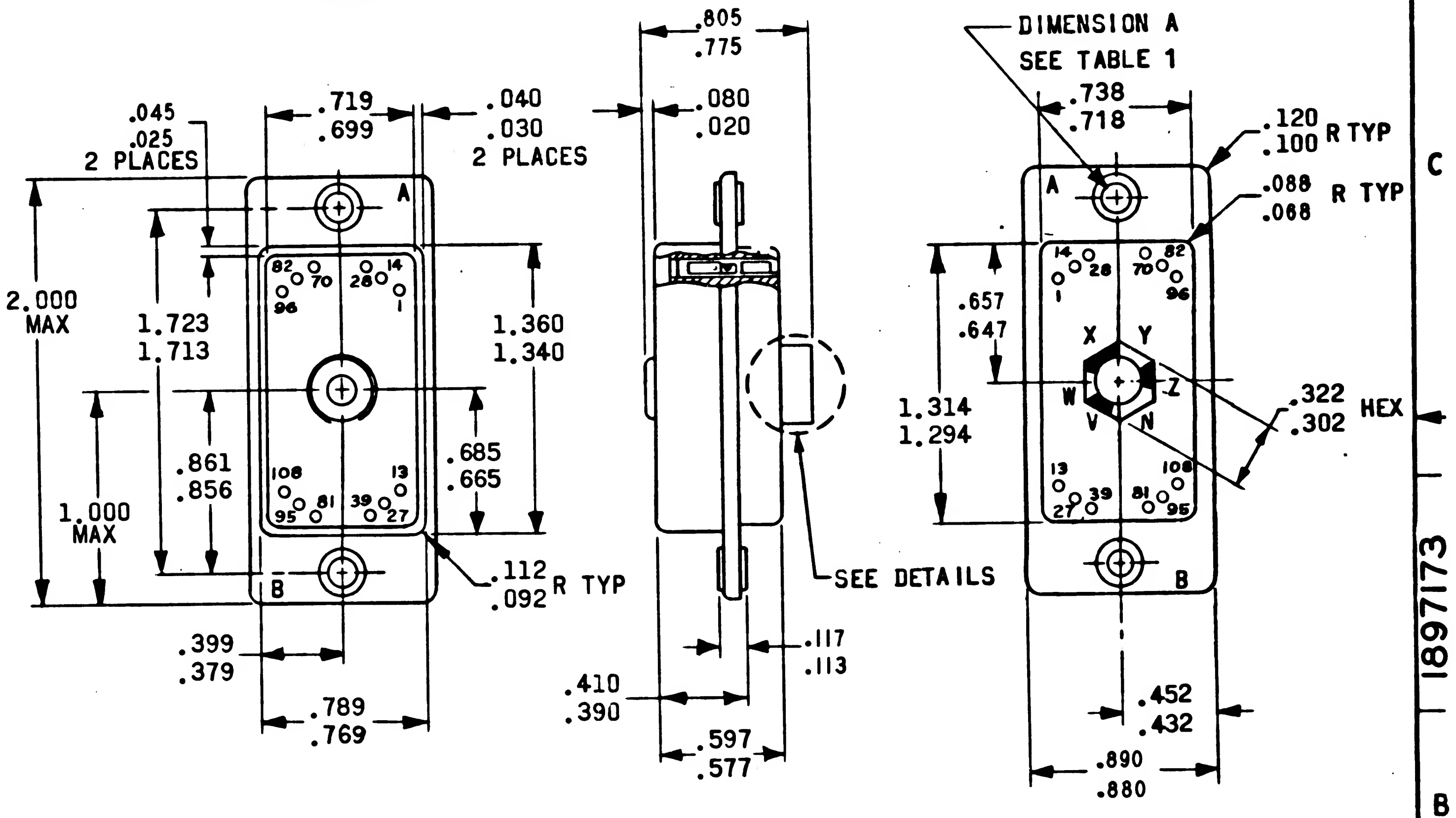


FIGURE 2



NOTES:
1. MATING CONNECTOR: 1010825 OR 1897174.

A	A	A
SHEET 1	SHEET 2	SHEET 3
REVISION STATUS OF SHEETS		

THE PART NUMBER IS THE DRAWING NUMBER PLUS THE APPLICABLE DASH NUMBER.

PROCURE ONLY FROM APPROVED SOURCES LISTED ON ND 1002034 FOR THIS DRAWING.

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY	USED ON

APPLICATION

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± —
DECIMALS ±.010 ±.03
ANGLES ± —
DO NOT SCALE THIS DRAWING
MATERIAL: SEE REQUIREMENTS
HEAT TREATMENT: NONE
FINAL FINISH: NONE

MIT
INSTRUMENTATION LAB
CAMBRIDGE MASS
DWG NO
Contract NAS 9-497

DRAWN Bender DATE 30-OCT-64
CHECKED Ed Foster 30 OCT 64
APPROVAL 30 OCT 64
APPROVAL M. Watson 10 DEC 64
NASA APPROVAL
MIT APPROVAL

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

CONNECTOR, RECEPTACLE, ELECTRICAL
(108 SOCKET CONTACTS)

SPECIFICATION CONTROL DRAWING

CODE IDENT NO.
SIZE C
NASA DRAWING NO. 1897173
SCALE NONE
WT
SHEET 1 OF 3

NOTICE — WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED FURNISHED OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO

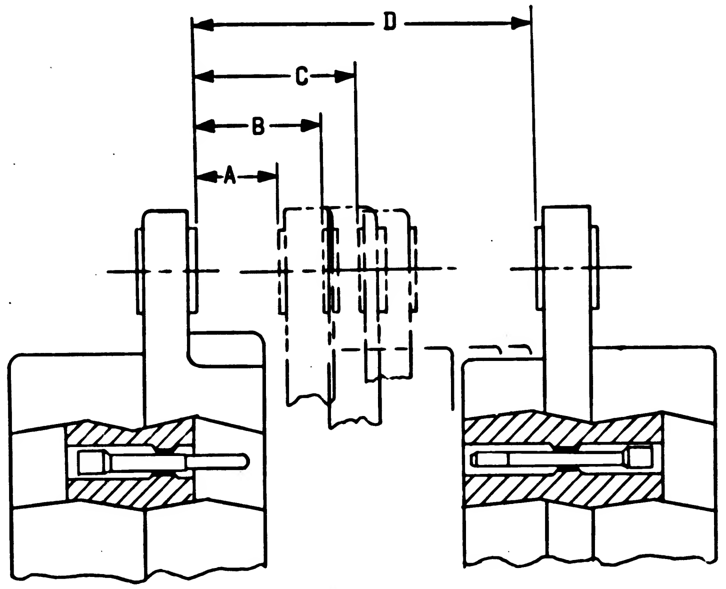
1897173 A

REVISIONS 14867

SYM	DESCRIPTION	DATE	APPROVAL
A	REVISED PER TDRR-14868	30 DEC 64	B. WT

TABLE II

	JACKSCREW	RACK & PANEL HARDWARE
A (FULLY ENGAGED)	.216±.012	.216±.012
B (PIN DISENGAGED)	.338±.038	.338±.038
C (HEX DISENGAGED)	.482±.012	.482±.012
D (FULLY DISENGAGED)	1.007±.036	.768±.038



FOR ENGINEERING REFERENCE ONLY

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY	USED ON

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING
MATERIAL
HEAT TREATMENT
FINAL FINISH

MIT
INSTRUMENTATION LAB
CAMBRIDGE MASS
DWG NO Contract NAS 9-497

DRAWN Bender DATE 30 OCT-64
CHECKED Ed Foster 30 OCT 64
APPROVAL [illegible] 30 OCT 64
APPROVAL [illegible]
NASA APPROVAL [illegible]
MIT APPROVAL [illegible]

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CONNECTOR, RECEPTACLE, ELECTRICAL
(FOR NO. 22 SOCKET CONTACTS)
SPECIFICATION CONTROL DRAWING

CODE IDENT NO.
SIZE C
NASA DRAWING NO. 1897173
SCALE NONE
WT
SHEET 2 OF 3

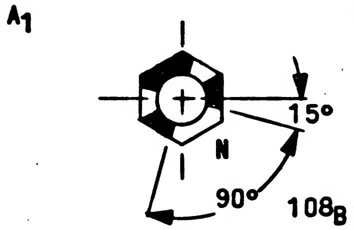
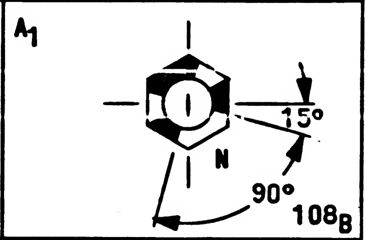
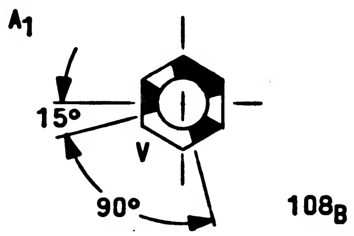
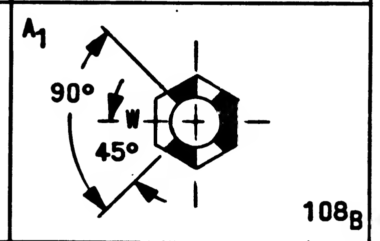
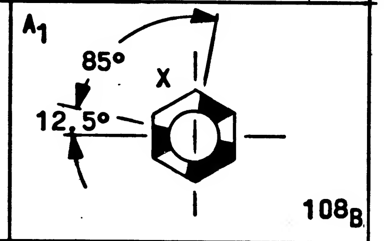
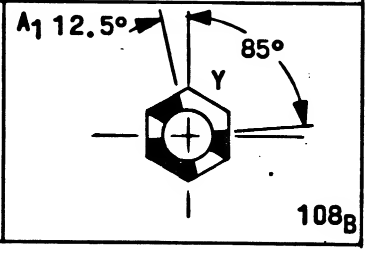
1897173

NOTICE — WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

1897173 A

REVISIONS			
SYM	DESCRIPTION	DATE	APPROVAL
A	THIS SHEET ADDED PER TDRR-14868	30 DEC 64	RJF W.D.

TABLE I

DASH NO.	FIG. NO.	POLARIZING POSITION
-1	1	
-2	2	
-3	1	
-4	1	
-5	1	
-6	1	

Ⓐ THIS SHEET ADDED

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY	USED ON

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING
MATERIAL
HEAT TREATMENT
FINAL FINISH

M I T
INSTRUMENTATION LAB
CAMBRIDGE, MASS.
DWG. NO. CONTRACT

DRAWN R.J.Fox DATE 12-30-64
CHECKED W. Diehl 5 JAN. '65
APPROVAL 5 JAN 65
APPROVAL J. M. Watson 1-19-65
NASA APPROVAL W. J. Rhine 1-19-65
MIT APPROVAL 19 Jan 65

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

CONNECTOR RECEPTACLE, ELECTRICAL
(108 SOCKET CONTACTS)

SPECIFICATION CONTROL DRAWING

CODE IDENT NO.
SIZE C
NASA DRAWING NO. 1897173
SCALE
WT
SHEET 3 OF 3

1897173

4 | 3 | 2 | 1

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1897173

REVISIONS 14867			
SYM	DESCRIPTION	DATE	APPROVAL

TABLE II

NASA DASH NUMBER	POLARIZATION BOSS POSITION	APPLICATION
-1	NORMAL	JACK SCREW
-2	NORMAL	RACK AND PANEL

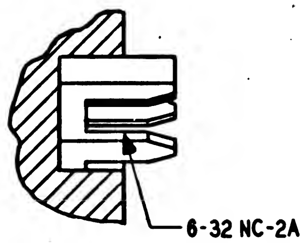
REQUIREMENTS:

1. GENERAL:
   - A. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327.
   - B. SUPPLIER SHALL CONFORM TO THE QUALITY ASSURANCE PROVISIONS SPECIFIED IN NASA DOCUMENT ND 1015404, CLASS 2.
   - C. UNITS SHALL BE CAPABLE OF MEETING ALL QUALIFICATION REQUIREMENTS SPECIFIED IN ND 1002052.
   - D. CONNECTOR IS DESIGNED TO USE SOCKET CONTACTS PER ND 1010738.

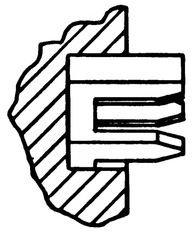
2. INSPECTION AND ACCEPTANCE:
   - A. MECHANICAL PROPERTIES.
     - (1) MATERIAL:
       - (a) BODY: DIALLYLPHTHALATE PER MIL-M-14, TYPE SDG-F (TAN COLOR)
       - (b) HARDWARE: ALIGNMENT HARDWARE ALUMINUM ALLOY GRADE 7075T6 PER QQ-A-277-1 GRAY ANODIZE PER MIL-A-8625 TYPE I.
     - (2) MARKING: UNITS SHALL BE MARKED IN ACCORDANCE WITH ND 1002019 WITH THE MANUFACTURER'S NAME AND/OR SYMBOL, NASA DRAWING NUMBER, DASH NUMBER AND REVISION LETTER, LOT OR SERIAL NUMBER TRACEABLE TO DATE OF MANUFACTURE. THE MANUFACTURER'S PART NUMBER MAY APPEAR ON THE PART OR PACKAGE.
   - B. ELECTRICAL CHARACTERISTICS: (CONTACTS INSTALLED)
     - (1) INSULATION RESISTANCE: 2000 MEGOHMS MINIMUM AT 160°F MEASURED BETWEEN ANY TWO ADJACENT CONTACTS AND BETWEEN THE SHELL OR HARDWARE AND ANY CONTACT.
     - (2) DIELECTRIC STRENGTH: SEA LEVEL - NO EVIDENCE OF BREAKDOWN OR FLASHOVER WHEN TESTED AT 600 VRMS. 90,000 TO 130,000 FT - NO EVIDENCE OF BREAKDOWN OR FLASHOVER WHEN 100 VRMS APPLIED BETWEEN ANY PAIR OF CONTACTS AND BETWEEN THE HARDWARE AND ANY CONTACT.
     - (3) VOLTAGE RATINGS:

	DC VOLTS	AC VOLTS RMS
SEA LEVEL	490	350
10,000 FEET	390	280
60,000 FEET	140	100

     - (4) WITHSTANDING VOLTAGE: (SEA LEVEL) 1500 VOLTS RMS 60 CPS WITHOUT FLASHOVER.



1010824-1



1010824-2

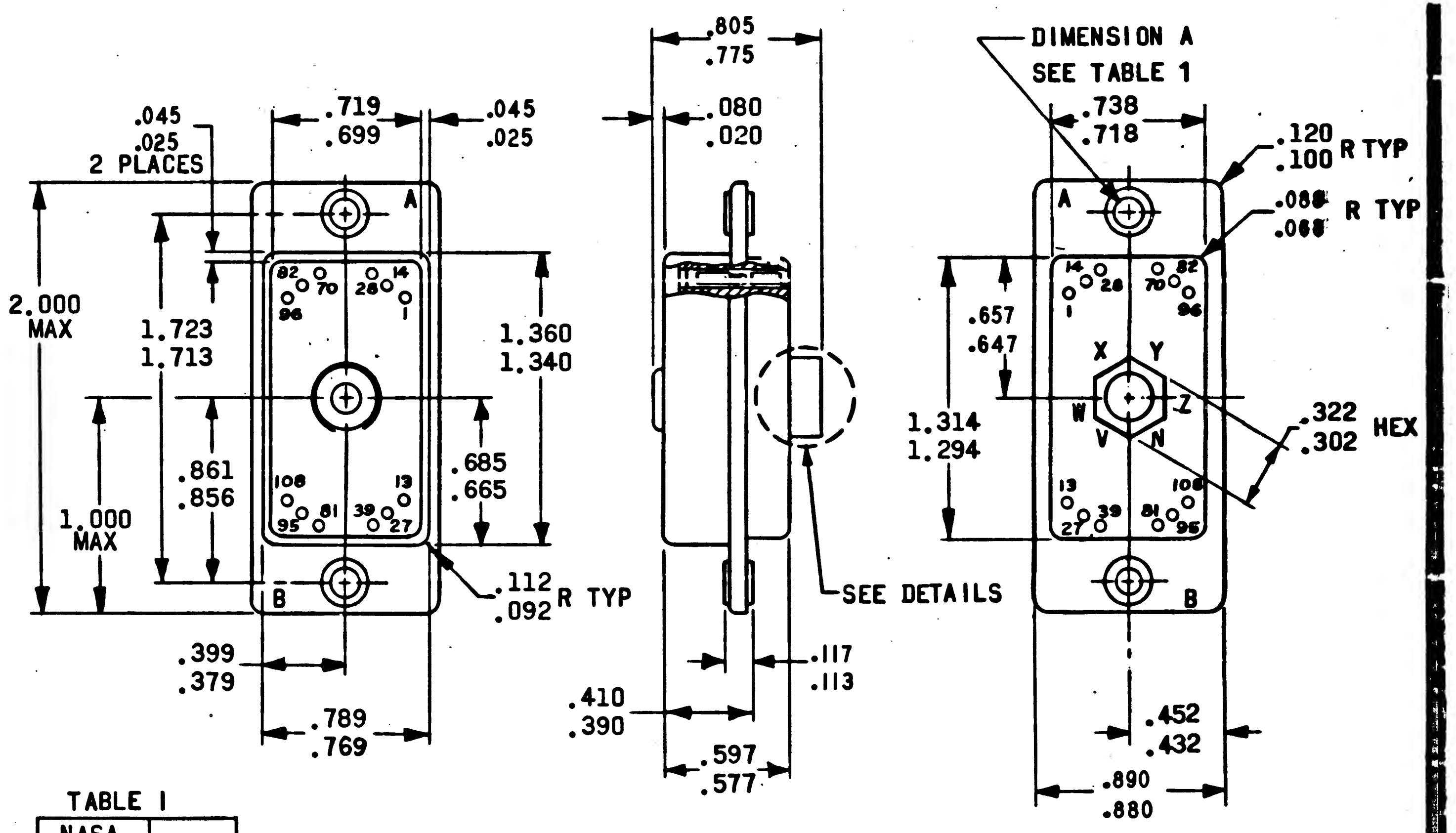


TABLE I

NASA DASH NUMBER	A
-1	.130 .120
-2	.130 .120

SHEET 1	SHEET 2
REVISION STATUS OF SHEETS	

THE PART NUMBER IS THE DRAWING NUMBER PLUS THE APPLICABLE DASH NUMBER.

PROCURE ONLY FROM APPROVED SOURCES LISTED ON ND 1002034 FOR THIS DRAWING.

MASTER

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± — DECIMALS ±.010 ±.03 ANGLES ± —
DO NOT SCALE THIS DRAWING

MATERIAL
SEE REQUIREMENTS

HEAT TREATMENT
NONE

FINAL FINISH
NONE

MIT
INSTRUMENTATION LAB
CAMBRIDGE, MASS
DWG NO Contract NAS 9-497

DRAWN Bender DATE 30-OCT-64
CHECKED Ed Foster 30 OCT 64
APPROVAL 30 OCT 64
APPROVAL J M Watson 1 DEC 64
NASA APPROVAL 12/15
MIT APPROVAL 12/15/64

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

CONNECTOR, RECEPTACLE, ELECTRICAL
(108 SOCKET CONTACTS)

SPECIFICATION CONTROL DRAWING

CODE IDENT NO. | SIZE C | NASA DRAWING NO. 1897173
SCALE NONE | WT | SHEET 1 OF 2

4 | 3 | 2 | 1

INCHES
0 1 2
PHOTOGRAPHIC SCALE ONLY

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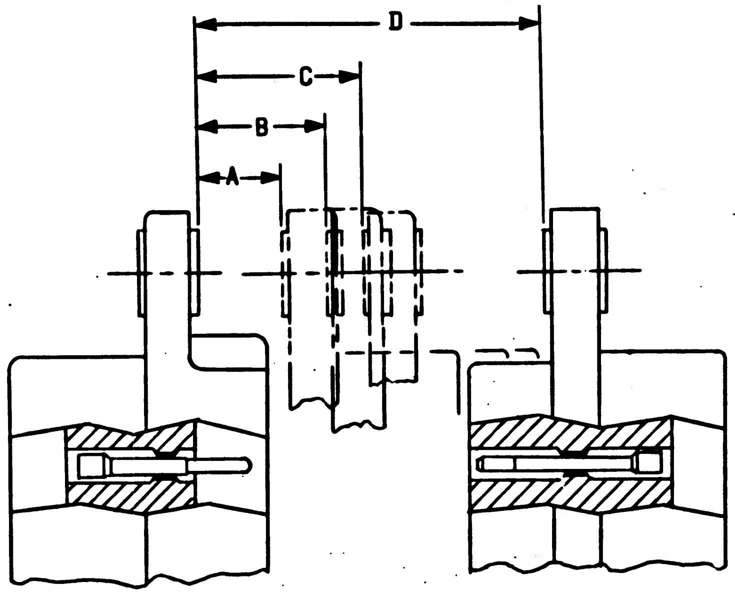
1897173

REVISIONS 14867			
SYM	DESCRIPTION	DATE	APPROVAL

TABLE III

	JACKSCREW	RACK & PANEL HARDWARE
A (FULLY ENGAGED)	.216±.012	.216±.012
B (PIN DISENGAGED)	.338±.038	.338±.038
C (HEX DISENGAGED)	.482±.012	.482±.012
D (FULLY DISENGAGED)	1.007±.036	.768±.038



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APPLICATION	

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DO NOT SCALE THIS DRAWING
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HEAT TREATMENT
FINAL FINISH

MIT
INSTRUMENTATION LAB
CAMBRIDGE MASS
DWG NO Contract NAS 9-497

DRAWN Bender DATE 30-OCT-64
CHECKED Ed Foster 30 OCT 64
APPROVAL 30 OCT 64
APPROVAL M. Watson 12/15/64
NASA APPROVAL 12/15
MIT APPROVAL 12/15/64

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

CONNECTOR, RECEPTACLE, ELECTRICAL
(FOR NO. 22 SOCKET CONTACTS)
SPECIFICATION CONTROL DRAWING

CODE IDENT NO.
SIZE C
NASA DRAWING NO. 1897173
SCALE NONE
WT
SHEET 2 OF 2

INCHES
0 1 2
PHOTOGRAPHIC SCALE ONLY

1897174

SYM	DESCRIPTION	DATE	APPROVAL
	REVISIONS 14867		

NOTICE — WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER, AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REQUIREMENTS:

1. GENERAL:
   - A. INTERPRET DRAWING SYMBOLS, ABBREVIATIONS AND REFERENCE DESIGNATIONS IN ACCORDANCE WITH GOVERNMENT STANDARDS PRESCRIBED IN MIL-D-70327.
   - B. SUPPLIER SHALL CONFORM TO THE QUALITY ASSURANCE PROVISIONS SPECIFIED IN NASA DOCUMENT ND 1015404, CLASS 2.
   - C. UNITS SHALL BE CAPABLE OF MEETING ALL QUALIFICATION REQUIREMENTS SPECIFIED IN ND 1002052.
   - D. CONNECTOR IS DESIGNED TO UTILIZE PIN CONTACTS PER 1010738.

2. INSPECTION AND ACCEPTANCE:
   - A. MECHANICAL REQUIREMENTS:
     - (1) MATERIAL:
       - (a) BODY AND DIALLYLPHTHALATE PER MIL-M-14, TYPE SDG-F OFF WHITE TO TAN COLOR
       - (b) HARDWARE:
         - SPACER: DIALLYLPHTHALATE PER MIL-M-14 TYPE SDG-F.
         - GUIDE PIN AND METAL INSERT: CORROSION RESISTANT STEEL, CLASS 303 OR 303 Se CONDITION A OR B PER QQ-S-763 EQUIVALENT OR BETTER, PASSIVATED PER MIL-F-14072 FINISH E-300 EQUIVALENT OR BETTER. JACKSCREW LUBRICATED.
         - POLARIZING BOSS: ALUMINUM ALLOY GRADE 7075T6 PER QQ-A-277-1 GRAY ANODIZE PER MIL-A-8625 TYPE I.
         - RETAINING RING: MS16632-28 PER MIL-R-21248.
     - (2) DIMENSIONS PER DRAWING.
     - (3) MARKING: UNITS SHALL BE MARKED IN ACCORDANCE WITH ND 1002019 WITH THE MANUFACTURER'S NAME AND/OR SYMBOL, NASA DRAWING NUMBER, DASH NUMBER AND REVISION LETTER, THE MANUFACTURER'S LOT OR SERIAL NUMBER TRACEABLE TO DATE OF MANUFACTURE. MANUFACTURER'S PART NUMBER MAY APPEAR ON THE PART OR PACKAGE.
   - B. ELECTRICAL REQUIREMENTS: (CONTACTS INSTALLED)
     - (1) INSULATION RESISTANCE: 2000 MEGOHMS MINIMUM AT 150°F MEASURED BETWEEN ANY TWO ADJACENT CONTACTS AND BETWEEN THE SHELL OR HARDWARE AND ANY ADJACENT CONTACT.
     - (2) DIELECTRIC STRENGTH: SEA LEVEL - NO EVIDENCE OF BREAKDOWN OR FLASHOVER WHEN TESTED AT 1500 VRMS. 90,000 TO 130,000 FT. - NO EVIDENCE OF BREAKDOWN OR FLASHOVER WHEN 100 VRMS APPLIED BETWEEN ANY PAIR OF CONTACTS AND BETWEEN THE HARDWARE AND ANY CONTACT.
     - (3) VOLTAGE RATINGS:

	VOLTS DC	VOLTS ACRMS
SEA LEVEL	490	350
10,000 FT	390	280
60,000 FT	140	100

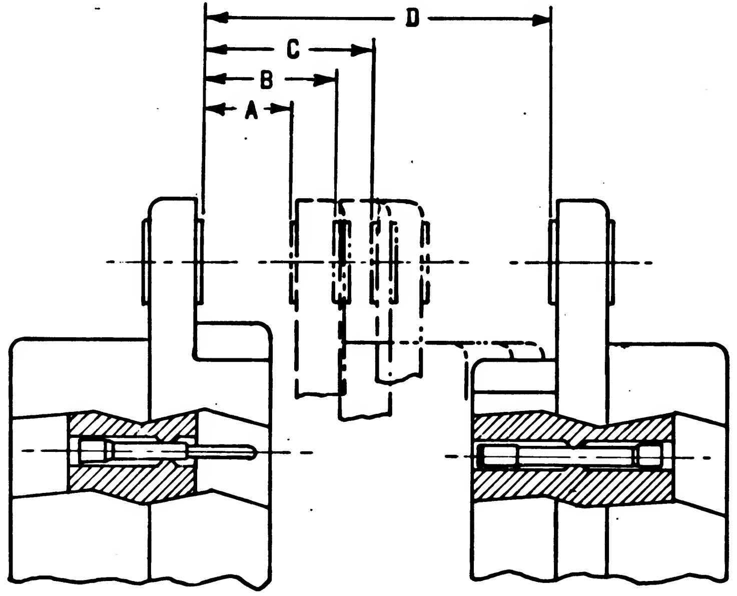
WITHSTANDING VOLTAGE (SEA LEVEL) 1500 VOLTS RMS 60 CPS WITHOUT FLASHOVER.

NOTES:

1. POLARIZATION BOSS SHOWN IN "N" POSITION.

PROCURE ONLY FROM APPROVED SOURCES LISTED ON ND 1002034 FOR THIS DRAWING.

	JACKSCREW	RACK & PANEL HARDWARE
A (FULLY ENGAGED)	.216±.012	.216±.012
B (PIN DISENGAGED)	.338±.012	.338±.012
C (HEX DISENGAGED)	.482±.012	.482±.012
D (FULLY DISENGAGED)	1.007±.036	.768±.038



FOR ENGINEERING REFERENCE ONLY

(MATES WITH 1010824)

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

SHEET 1	SHEET 2	

REVISION STATUS OF SHEETS

NEXT ASSY	USED ON

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± — DECIMALS ±.010 ±.03 ANGLES ± —
DO NOT SCALE THIS DRAWING

MATERIAL
SEE REQUIREMENTS

HEAT TREATMENT
NONE

FINAL FINISH
NONE

M I T
INSTRUMENTATION LAB
CAMBRIDGE MASS
DWG NO Contract NAS 9-497

DRAWN Janowiak DATE 29 OCT 64
CHECKED Ed Foster 30 Oct 64
APPROVAL 30 Oct 64
APPROVAL J. M. Watson 1 Dec 64
NASA APPROVAL 12/1
MIT APPROVAL 12/15/64

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

CONNECTOR, PLUG, ELECTRICAL
(108 PIN CONTACTS
NO. 22)

SPECIFICATION CONTROL DRAWING

CODE IDENT NO.
SIZE C
NASA DRAWING NO. 1897174
SCALE NONE
WT
SHEET 1 OF 2

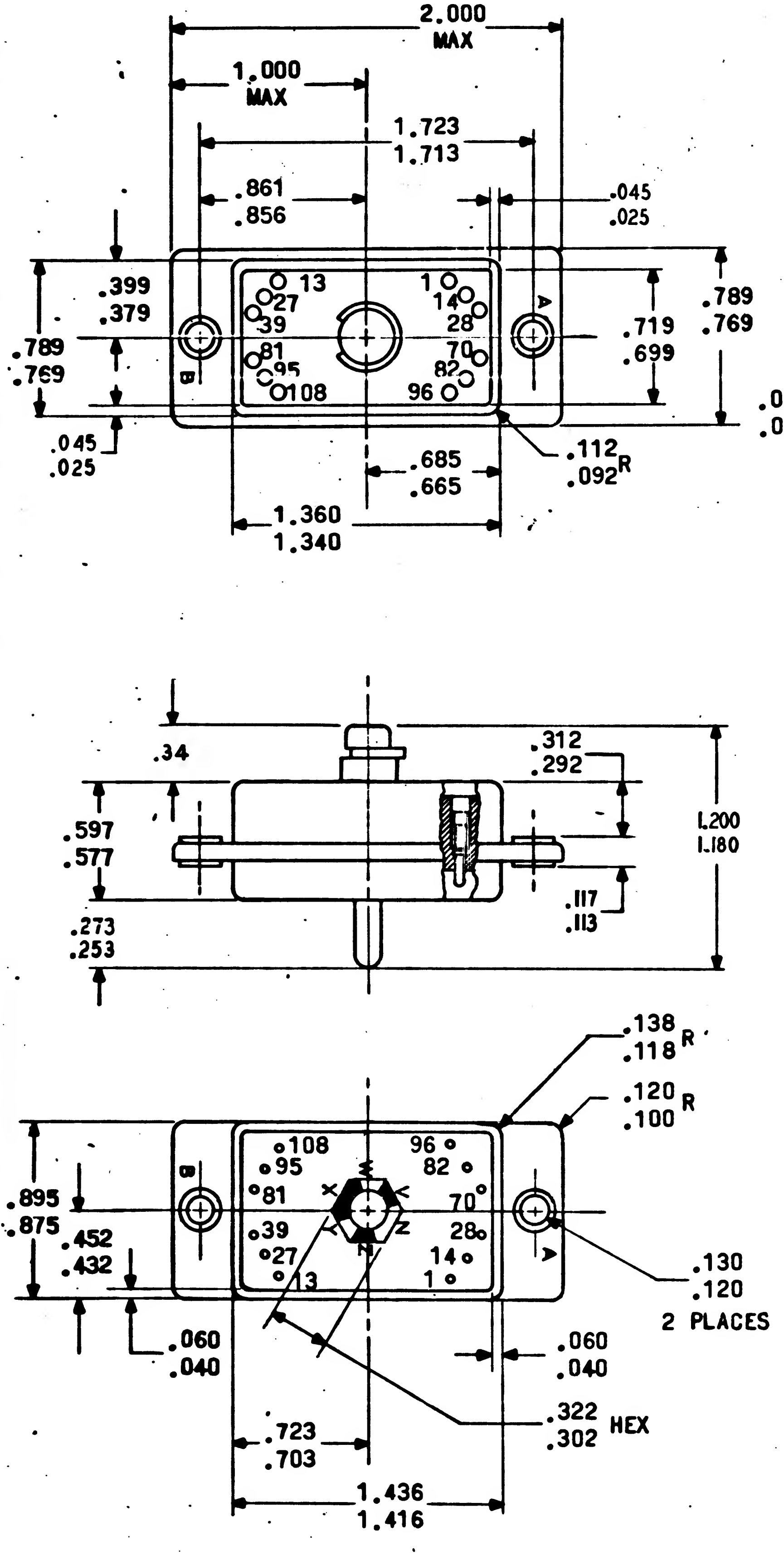
INCHES
0 1 2
PHOTOGRAPHIC SCALE

NOTICE — WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER, AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

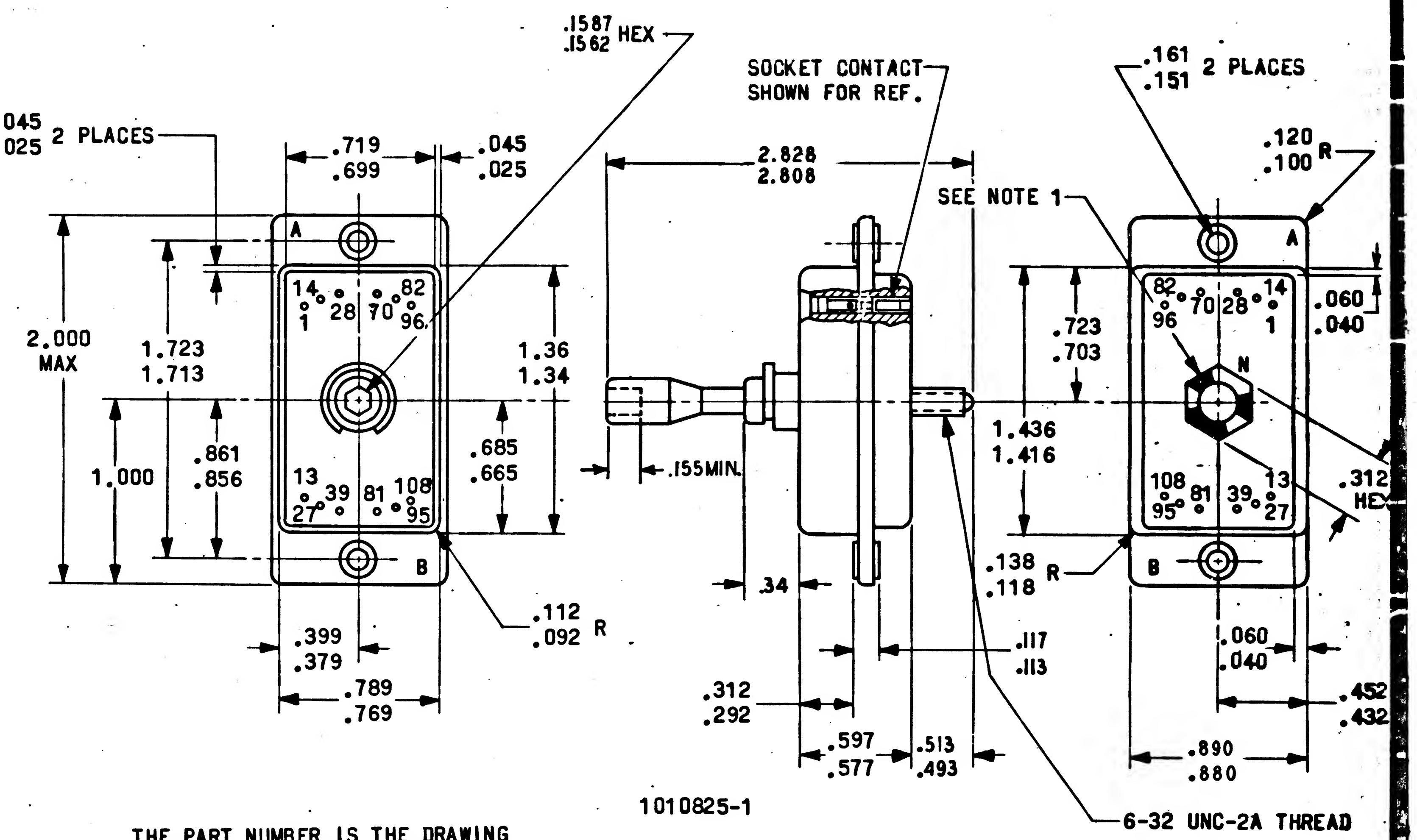
1897174

REVISIONS 14867			
SYM	DESCRIPTION	DATE	APPROVAL

NASA DASH NUMBER	POLARIZATION BOSS POSITION
-1	NORMAL
-2	NORMAL



1010825-2



1010825-1

THE PART NUMBER IS THE DRAWING NUMBER PLUS THE APPLICABLE DASH NUMBER.

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING
MATERIAL
HEAT TREATMENT
FINAL FINISH

M I T
INSTRUMENTATION LAB
CAMBRIDGE, MASS
DWG NO Contract NAS 9-497

DRAWN Janowiak DATE 29 OCT 64
CHECKED Ed Foster 30 OCT 64
APPROVAL 30 OCT 64
APPROVAL J. M. Watson 1 DEC 64
NASA APPROVAL
MIT APPROVAL 12/15/67

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

CONNECTOR, PLUG, ELECTRICAL
(108 PIN CONTACTS
NO. 22)
SPECIFICATION CONTROL DRAWING

CODE IDENT NO.
SIZE C
NASA DRAWING NO. 1897174
SCALE
WT
SHEET 2 OF 2

INCHES
0 1 2
PHOTOGRAPHIC SCALE ONLY

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1897178 | A

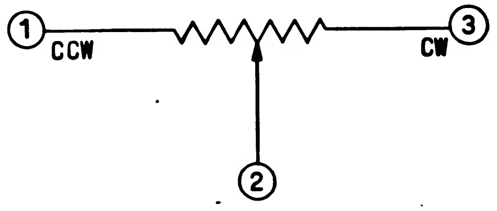
REVISIONS 17590			
SYM	DESCRIPTION	DATE	APPROVAL
A	REVISED PER TDRR 17659	29 MAR 65	EF

REQUIREMENTS:

1. GENERAL:
   - A. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327.
   - B. SUPPLIER SHALL CONFORM TO QUALITY ASSURANCE PROVISIONS SPECIFIED IN MIL-Q-9858.

2. INSPECTION AND ACCEPTANCE:
   - A. MECHANICAL REQUIREMENTS:
     - (1) MARKING: (PER MIL-STD-130) PARTS SHALL BE PERMANENTLY AND LEGIBLY MARKED WITH THE MANUFACTURER'S NAME OR SYMBOL, PART NUMBER OR TYPE NUMBER AND RESISTANCE VALUE.
   - B. ELECTRICAL REQUIREMENTS:
     - (1) TOTAL RESISTANCE: PER TABLE I.
     - (2) RESISTANCE TOLERANCE: ±10%

3. DESIGN:
   - A. POWER RATING AT 40°C: 7.5 WATTS MOUNTED ON 4 x 4 x .040 STEEL PANEL, 5 WATTS MOUNTED ON A NON-METALLIC PANEL.
   - B. CURRENT RATING: PER TABLE I.
   - C. ELECTRICAL ROTATION: 300 ±5 DEGREES.
   - D. TAPER: LINEAR.
   - E. TORQUE: 3 IN. OZ MAX
   - F. ENVIRONMENTAL REQUIREMENTS (OPERATING)
     - (1) TEMPERATURE: 10°C TO 38°C
   - G. ENVIRONMENTAL REQUIREMENTS (NON OPERATING)
     - (1) TEMPERATURE: -40°C TO +71°C (MIL-STD-810 METHOD 501 & 502)
     - (2) ALTITUDE: 40,000 FT (MIL-STD-810, METHOD 500)
     - (3) HUMIDITY: 95%, 40°C, 100 HOURS (MIL-R-22).
     - (4) SHOCK: 50 G, 11 MILLISECOND (MIL-STD-202A, METHOD 205B, COND. C)
     - (5) VIBRATION: .06", 10G, 10-200 CYCLES



GRAPHICAL SYMBOL

(NUMBERS ARE FOR REF ONLY)

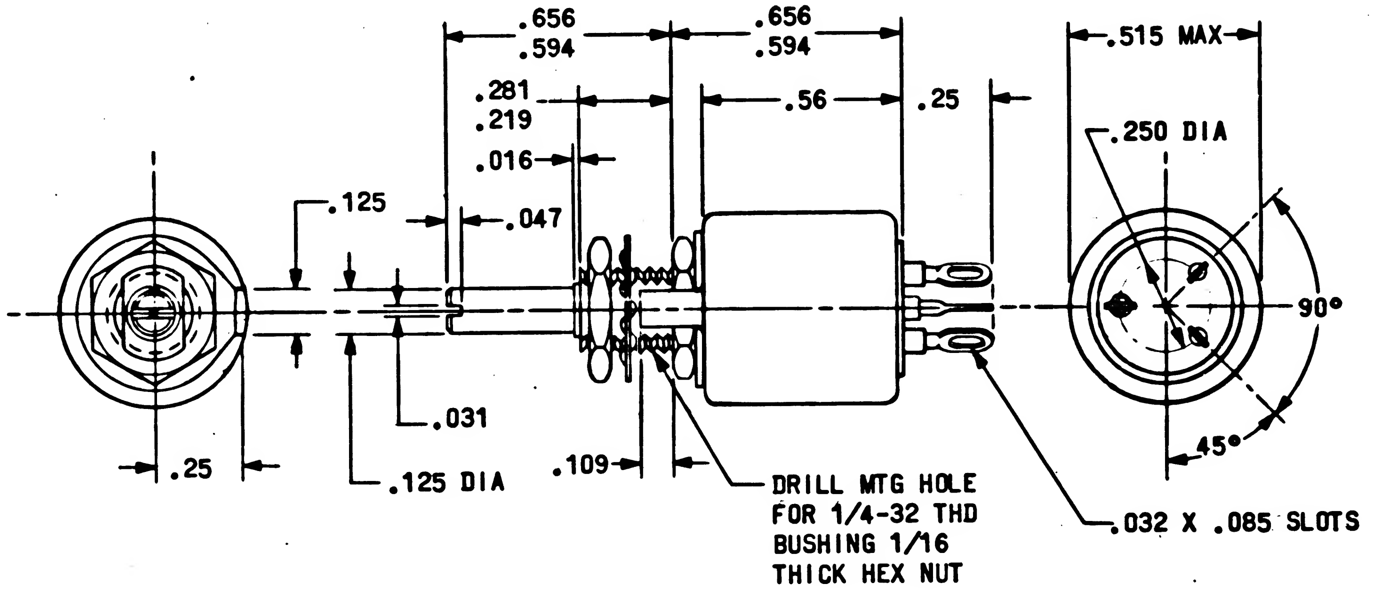


TABLE I

NASA DASH NUMBER	RESISTANCE OHMS	CURRENT RATING MAX AMPS.	MANUFACTURER'S MODEL NUMBER (REF)
-010	1500	.071	C

THE PART NUMBER IS THE DRAWING NUMBER PLUS THE APPLICABLE DASH NUMBER.

PROCURE ONLY FROM APPROVED SOURCES LISTED ON ND 1002034 FOR THIS DRAWING.

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.
LIST OF MATERIALS			

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± —
DECIMALS ±.005 ±.02
ANGLES ±1/2°
DO NOT SCALE THIS DRAWING

MATERIAL
SEE REQUIREMENTS

HEAT TREATMENT
NONE

FINAL FINISH
NONE

MIT
INSTRUMENTATION LAB
CAMBRIDGE, MASS
DWG. NO. Contract NAS 9-497

DRAWN Bender DATE 9-DEC-64
CHECKED Ed Foster 9 DEC 64
APPROVAL J. Uber 9 Dec 64
APPROVAL J. M. Watson 1-28-65
NASA APPROVAL G. C. M 3/11/65
MIT APPROVAL W. Mosley 3/5/65

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

RESISTOR, VARIABLE-WIREWOUND,
5 WATTS (1/2 INCH DIA)

SPECIFICATION CONTROL DRAWING

CODE IDENT NO.
SIZE C
NASA DRAWING NO. 1897178
SCALE NONE
WT
SHEET 1 OF 1

1897178

1897180	C

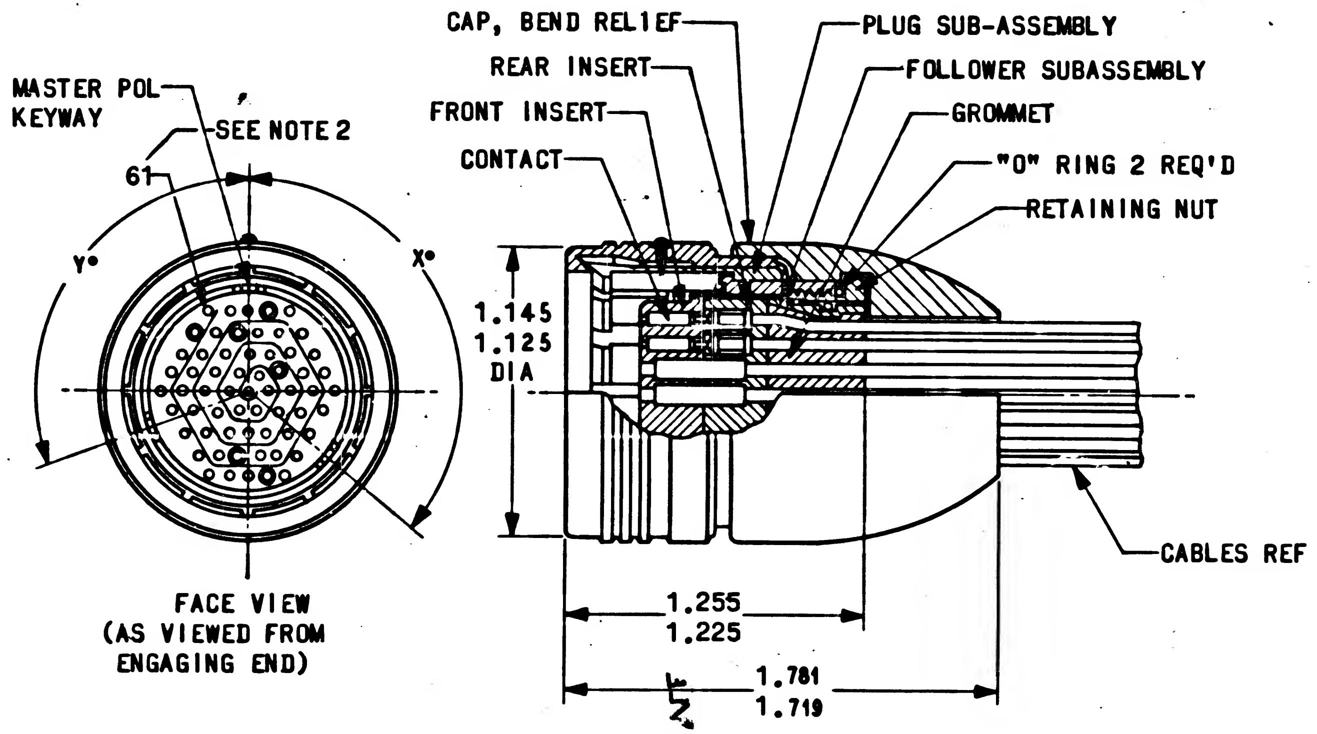
NOTICE — WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REVISIONS			
SYM	DESCRIPTION	DATE	APPROVAL
A	REVISED PER MXC 309376	3 AUG 65	RLP EJ
B	REVISED PER MXC 203852	12 AUG 66	JWP RWH
C	INITIAL RELEASE CLASS A PER TDRR 24043	18 OCT 65	JR

REQUIREMENTS:

1. GENERAL:
   - A. INTERPRET DRAWING SYMBOLS, ABBREVIATIONS AND REFERENCE DESIGNATIONS IN ACCORDANCE WITH GOVERNMENT STANDARDS PRESCRIBED IN MIL-D-70327.
   - B. SUPPLIER SHALL CONFORM TO THE QUALITY ASSURANCE PROVISIONS SPECIFIED IN MIL-Q-9858
   - C. SOCKET CONTACTS SHALL BE PROCURED SEPARATELY PER 1010781 OR 1897213

2. INSPECTION AND ACCEPTANCE:
   - A. MECHANICAL REQUIREMENTS:
     - (1) MATERIAL:
       - (a) COUPLING RING, PLUG SHELL, FOLLOWER, NUT, RETAINING; ALUMINUM ALLOY PER QQ-A-351, TEMPER T4
       - (b) INSERT, FRONT AND REAR: DIALLYLPHTHALATE PER MIL-M-14 TYPE SDG.
       - (c) CAP BEND RELIEF, "O" RINGS AND GROMMET: SILICONE RUBBER, PER MIL-R-5847, CLASS II
       - (d) SPRING LOCKING: ALUMINUM ALLOY PER QQ-A-268, TEMPER T4
       - (e) KEY: STAINLESS STEEL PER MIL-S-7720, TYPE 303
       - (f) SPRING: BERYLLIUM COPPER, PER QQ-C-530, 1/2 HARD
     - (2) FINISHES:
       - (a) COUPLING RING, PLUG SHELL, FOLLOWER, SPRING LOCKING, NUT RETAINING: CLEAR ANODIZE PER MIL-A-8625, TYPE 2
       - (b) KEY: PASSIVATE AND BLACK OXIDE, PER MIL-C-13924, CLASS III
       - (c) SPRING: SILVER PLATED
     - (3) FOR POLARIZATION SEE TABLE I
     - (4) MARKING:
       - (a) PIECEMARKING: UNITS SHALL BE MARKED IN ACCORDANCE WITH ND 1002019 WITH THE MANUFACTURER'S NAME AND/OR SYMBOL, NASA PART NUMBER. THE MANUFACTURER'S PART NUMBER MAY APPEAR ON THE PART.
       - (b) PACKAGE: INTERNAL INDIVIDUAL OR COLLECTIVE PACKAGES AND EXTERNAL PACKAGING SHALL BE MARKED WITH THE FOLLOWING INFORMATION:
         - SUPPLIER'S NAME
         - NASA PART NUMBER AND REVISION LETTER
         - DATE CODE, OR DATE OF MANUFACTURE
       - (c) MANUFACTURER'S PART NUMBER MAY APPEAR ON THE PACKAGE.



FACE VIEW
(AS VIEWED FROM ENGAGING END)

PROCURE ONLY FROM SOURCES LISTED ON CONTRACTOR'S ACCEPTABLE SUPPLIERS LIST FOR THIS DRAWING.

MASTER

SHEET 1	SHEET 2
REVISION STATUS OF SHEETS	

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± — DECIMALS ± — ANGLES ± —
DO NOT SCALE THIS DRAWING

MATERIAL
SEE REQUIREMENTS

HEAT TREATMENT
NONE

FINAL FINISH
SEE REQUIREMENTS

MIT
INSTRUMENTATION LAB
CAMBRIDGE, MASS.
DWG NO
Contract NAS 9-497

DRAWN Bender 16 DEC 64 DATE
CHECKED C. Wilson 17DEC 64
APPROVAL 17DEC 64
APPROVAL J. M. Watson 10-11-65
A. C. METZGER
NASA APPROVAL A. C. METZGER
MIT APPROVAL 16 Nov 65

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

CONNECTOR, PLUG, ELECTRICAL-
61 CONTACT CAVITIES
SUB MINIATURE, ENVIRONMENT RESISTANT
SPECIFICATION CONTROL DRAWING

CODE IDENT NO.	SIZE	NASA DRAWING NO.
99974	C	1897180
SCALE NONE	WT	SHEET 1 OF 2

Y40009S, 240002S
510214

NOTICE — WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REVISIONS

SYM	DESCRIPTION	DATE	APPROVAL
A	REVISED PER MXC 309376	3 AUG 65	RLP EF
B	REVISED PER MXC 203852	12 AUG 65	JWP RWH
C	INITIAL RELEASE CLASS A PER TDRR 24043	18 OCT 65	JR JB

REQUIREMENTS: (CONTINUED)

3. DESIGN:
   - A. ELECTRICAL REQUIREMENTS WITH CONTACTS INSTALLED (500 VDC)
     - (1) INSULATION RESISTANCE: 2000 MEGOHMS MINIMUM AT 150°F MEASURED BETWEEN ANY TWO ADJACENT CONTACTS AND BETWEEN THE SHELL OR HARDWARE AND ANY ADJACENT CONTACT WHEN TESTED IN ACCORDANCE WITH MIL-STD-202 METHOD 302, CONDITION B.
     - (2) DIELECTRIC STRENGTH: SEA LEVEL - NO EVIDENCE OF BREAKDOWN OR FLASHOVER WHEN TESTED AT 1500 VRMS.
     - (3) VOLTAGE RATINGS:

	VOLTS AC RMS
SEA LEVEL	750

   - B. MECHANICAL:
     - (1) CONTACT RETENTION FORCE: WHEN CONTACTS ARE PROPERLY INSTALLED, THEY ARE CAPABLE OF WITHSTANDING (WITHOUT DAMAGE) A TOTAL FORCE OF 15 LBS. WHEN APPLIED TO THE MATING END OF THE CONTACT, AND A TOTAL FORCE OF 8 LBS. WHEN APPLIED TO THE REAR END OF THE CONTACT AFTER A MINIMUM OF 10 INSERTIONS AND WITHDRAWALS.
     - (2) TEMPERATURE RATING: -67°F TO +257°F

NOTES:

1. FOR MATING RECEPTACLE SEE DRAWING 1010783 OR 1897176
2. CONTACTS ARE NUMBERED WITH 1 AT CENTER AND A CIRCLE AROUND EVERY TENTH CAVITY. THE FINAL CONTACT CAVITY SHALL BE IDENTIFIED AS 61

NASA DASH NUMBER	POLARIZATION	ALTERNATE POLARIZING POSITIONS		MANUFACTURER'S IDENTIFICATION (FOR REF)
		X°	Y°	
-1	NORMAL	130	110	C43 EP-4S (062)
-2	ALTERNATE	130	90	C43 EP-4S-1 (062)

THE PART NUMBER IS THE DRAWING NUMBER PLUS THE APPLICABLE DASH NUMBER.

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING
MATERIAL
HEAT TREATMENT
FINAL FINISH

M I T
INSTRUMENTATION LAB
CAMBRIDGE, MASS.
DWG. NO. Contract NAS 9-497

DRAWN Bender DATE 16 DEC -64
CHECKED C Wilson 17 DEC 64
APPROVAL 17 DEC 64
APPROVAL J. M. Watson 10-11-65

NASA APPROVAL A. C. METZGER
MIT APPROVAL W Kupfer 16 Nov 64

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

CONNECTOR, PLUG, ELECTRICAL-
61 CONTACT CAVITIES
SUB MINIATURE, ENVIRONMENT RESISTANT
SPECIFICATION CONTROL DRAWING

CODE IDENT NO. 99974
SIZE C
NASA DRAWING NO. 1897180
SCALE
WT
SHEET 2 OF 2

MASTER

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1897180 D

REVISIONS			
SYM	DESCRIPTION	DATE	APPROVAL
A	REVISED PER MXC 309376	3 AUG 65	RLP EF
B	REVISED PER MXC 203852	12 AUG 65	JW RWH
C	INITIAL RELEASE CLASS A PER TDRR 24043	18 OCT 65	JR
D	REVISED PER TDRR-24347	1-DEC-65	B EF

REQUIREMENTS:

1. GENERAL:
   - A. INTERPRET DRAWING SYMBOLS, ABBREVIATIONS AND REFERENCE DESIGNATIONS IN ACCORDANCE WITH GOVERNMENT STANDARDS PRESCRIBED BY MIL-D-70327.
   - B. SUPPLIER SHALL CONFORM TO THE QUALITY ASSURANCE PROVISIONS SPECIFIED IN MIL-Q-9858.
   - C. SOCKET CONTACTS (QUANTITY: 63 MIN) PER 1897213 SHALL BE SUPPLIED WITH EACH UNIT.

2. INSPECTION AND ACCEPTANCE:
   - A. MECHANICAL REQUIREMENTS:
     - (1) MATERIAL:
       - (a) COUPLING RING, PLUG SHELL, FOLLOWER, NUT, RETAINING; ALUMINUM ALLOY PER QQ-A-351, TEMPER T4
       - (b) INSERT, FRONT AND REAR: DIALLYLPHTHALATE PER MIL-M-14 TYPE SDG.
       - (c) CAP BEND RELIEF, "O" RINGS AND GROMMET: SILICONE RUBBER, PER MIL-R-5847, CLASS II
       - (d) SPRING LOCKING: ALUMINUM ALLOY PER QQ-A-268, TEMPER T4
       - (e) KEY: STAINLESS STEEL PER MIL-S-7720, TYPE 303
       - (f) SPRING: BERYLLIUM COPPER, PER QQ-C-530, 1/2 HARD
     - (2) FINISHES:
       - (a) COUPLING RING, PLUG SHELL, FOLLOWER, SPRING LOCKING, NUT RETAINING: CLEAR ANODIZE
       - (b) KEY: PASSIVATE AND BLACK OXIDE, PER MIL-C-13924, CLASS III
       - (c) SPRING: SILVER PLATED
     - (3) FOR POLARIZATION SEE TABLE I
     - (4) MARKING:
       - (a) PIECEMARKING: UNITS SHALL BE MARKED IN ACCORDANCE WITH ND 1002019 WITH THE MANUFACTURER'S NAME AND/OR SYMBOL, NASA PART NUMBER. THE MANUFACTURER'S PART NUMBER MAY APPEAR ON THE PART.
       - (b) PACKAGE: INTERNAL INDIVIDUAL OR COLLECTIVE PACKAGES AND EXTERNAL PACKAGING SHALL BE MARKED WITH THE FOLLOWING INFORMATION:
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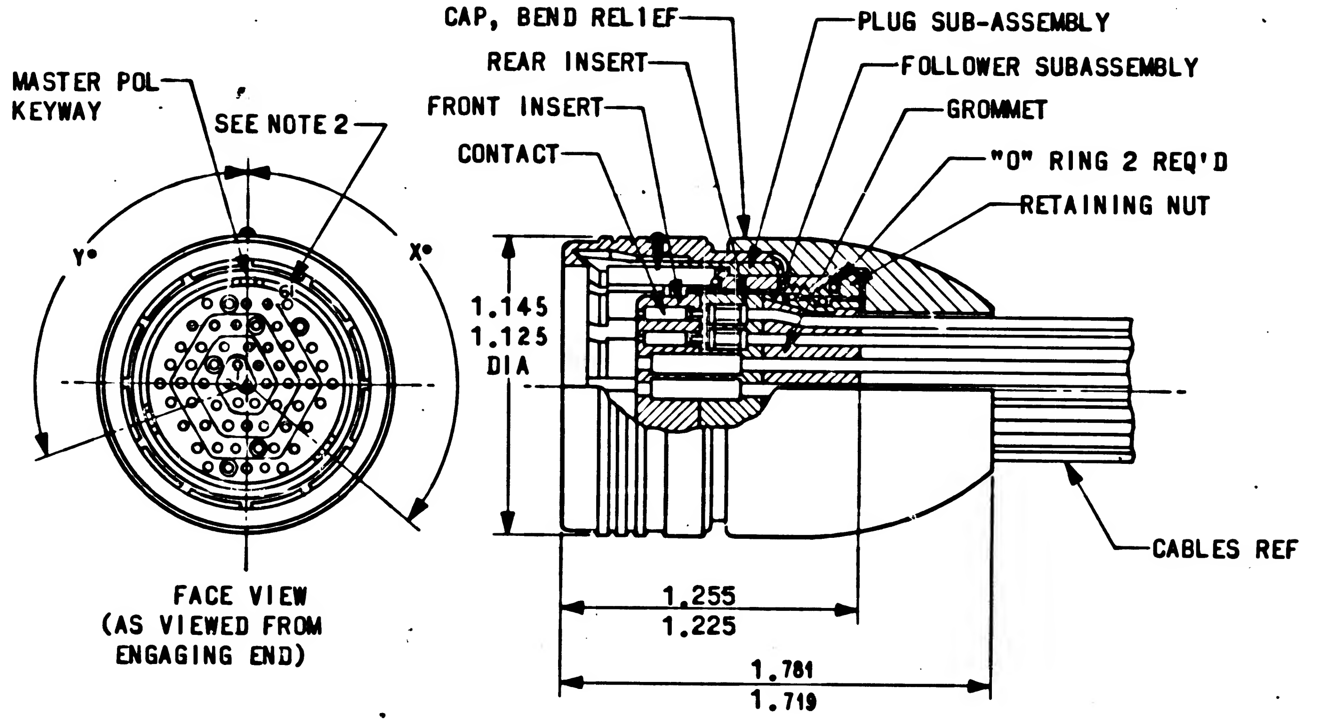
         - NASA PART NUMBER AND REVISION LETTER
         - DATE CODE, OR DATE OF MANUFACTURE
       - (c) MANUFACTURER'S PART NUMBER MAY APPEAR ON THE PACKAGE.
     - (5) CONTACT WITHDRAWAL FORCE: PER 1897213.



PROCURE ONLY FROM SOURCES LISTED ON CONTRACTORS ACCEPTABLE SUPPLIERS LIST FOR THIS DRAWING.

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± — DECIMALS ± — ANGLES ± —
DO NOT SCALE THIS DRAWING
MATERIAL: SEE REQUIREMENTS
HEAT TREATMENT: NONE
FINAL FINISH: SEE REQUIREMENTS

AC ELECTRONICS DIVISION
GENERAL MOTORS CORP. MILWAUKEE WIS.
Contract NAS 9-497

DRAWN Bender DATE 16 DEC 64
CHECKED C. Wilson 17 DEC 64
APPROVAL 17 DEC 64
APPROVAL J. M. Watson 10-11-65
NASA APPROVAL A. C. [illegible]
MIT APPROVAL 16 Nov 65

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

CONNECTOR, PLUG, ELECTRICAL-
61 CONTACT CAVITIES
SUB MINIATURE, ENVIRONMENT RESISTANT
SPECIFICATION CONTROL DRAWING

CODE IDENT NO. 99974
SIZE C
NASA DRAWING NO. 1897180
SCALE NONE
WT
SHEET 1 OF 2

A00095, 240007 10211

NOTICE — WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER, AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO

1897180 D

REVISIONS			
SYM	DESCRIPTION	DATE	APPROVAL
A	REVISED PER MXC 309376	3 AUG 65	RLP EF
B	REVISED PER MXC 203852	12 AUG 65	JWP RWH
C	INITIAL RELEASE CLASS A PER TDRR 24043	18 OCT 65	JR TG
D	REVISION STATUS CHANGED	1-DEC-65	B. EF

Ⓜ

REQUIREMENTS: (CONTINUED)

3. DESIGN:
   A. ELECTRICAL REQUIREMENTS WITH CONTACTS INSTALLED (500 VDC)
      (1) INSULATION RESISTANCE: 2000 MEGOHMS MINIMUM AT 150°F MEASURED BETWEEN ANY TWO ADJACENT CONTACTS AND BETWEEN THE SHELL OR HARDWARE AND ANY ADJACENT CONTACT WHEN TESTED IN ACCORDANCE WITH MIL-STD-202 METHOD 302, CONDITION B.
      (2) DIELECTRIC STRENGTH: SEA LEVEL - NO EVIDENCE OF BREAKDOWN OR FLASHOVER WHEN TESTED AT 1500 VRMS.
      (3) VOLTAGE RATINGS:

	VOLTS AC RMS
SEA LEVEL	750

   B. MECHANICAL:
      (1) CONTACT RETENTION FORCE: WHEN CONTACTS ARE PROPERLY INSTALLED, THEY ARE CAPABLE OF WITHSTANDING (WITHOUT DAMAGE) A TOTAL FORCE OF 15 LBS. WHEN APPLIED TO THE MATING END OF THE CONTACT, AND A TOTAL FORCE OF 8 LBS. WHEN APPLIED TO THE REAR END OF THE CONTACT AFTER A MINIMUM OF 10 INSERTIONS AND WITHDRAWALS.
      (2) TEMPERATURE RATING: -67°F TO +257°F

NOTES:

1. FOR MATING RECEPTACLE SEE DRAWING 1010783 OR 1897176
2. CONTACTS ARE NUMBERED WITH 1 AT CENTER AND A CIRCLE AROUND EVERY TENTH CAVITY. THE FINAL CONTACT CAVITY SHALL BE IDENTIFIED AS 61

NASA DASH NUMBER	POLARIZATION	ALTERNATE POLARIZING POSITIONS		MANUFACTURER'S IDENTIFICATION (FOR REF)
		X°	Y°	
-1	NORMAL	130	110	C43 EP-4S (062)
-2	ALTERNATE	130	90	C43 EP-4S-1 (062)

THE PART NUMBER IS THE DRAWING NUMBER PLUS THE APPLICABLE DASH NUMBER.

1897180

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING
MATERIAL
HEAT TREATMENT
FINAL FINISH

AC ELECTRONICS DIVISION
GENERAL MOTORS CORP MILWAUKEE WIS
Contract NAS 9-497

DRAWN Bender DATE 16 DEC -64
CHECKED C Wilson 17 DEC 64
APPROVAL 17 DEC 64
APPROVAL J. M. Watson 10-11-65
NASA APPROVAL A. C. METZGER
MIT APPROVAL

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

CONNECTOR, PLUG, ELECTRICAL-
61 CONTACT CAVITIES
SUB MINIATURE, ENVIRONMENT RESISTANT
SPECIFICATION CONTROL DRAWING

CODE IDENT NO. 99974
SIZE C
NASA DRAWING NO. 1897180
SCALE
WT
SHEET 2 OF 2

NOTICE — WHEN GOVERNMENT DRAWINGS SPECIFICATIONS OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

1897182 D

REVISIONS TDRR 19956

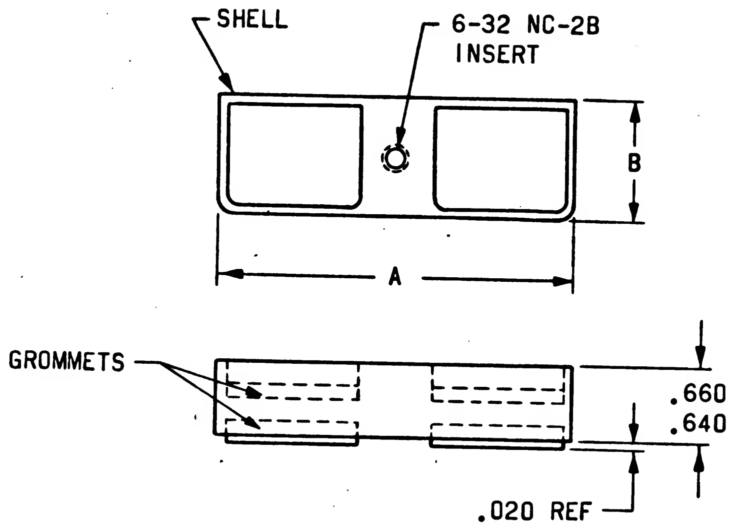
SYM	DESCRIPTION	DATE	APPROVAL
C	UPGRADED TO CLASS 'A'	12-MAY-65	
D	REVISED PER TDRR 21151	31 JUL 66	SKA RWH

REQUIREMENTS:

1. GENERAL:
   - A. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327.
   - B. SUPPLIER SHALL CONFORM TO THE APPLICABLE QUALITY ASSURANCE PROVISIONS SPECIFIED IN MIL-Q-9858.
   - C. CONTACTS SHALL BE PER 1010770 OR 1897190 PINS.

2. INSPECTION AND ACCEPTANCE:
   - A. MECHANICAL REQUIREMENTS:
     - (1) WITHSTANDING VOLTAGE: 1500 V RMS AT SEA LEVEL
     - (2) INSULATION RESISTANCE: 100,000 MEGOHMS AT +25°C AT 500 VDC
       5,000 MEGOHMS AT +125°C AT 500 VDC
     - (3) MARKING:
       - (a) PIECEMARKING: UNITS SHALL BE MARKED IN ACCORDANCE WITH ND 1002019 WITH THE MANUFACTURER'S NAME AND/OR SYMBOL AND NASA PART NUMBER. THE MANUFACTURER'S PART NUMBER MAY APPEAR ON THE PART. PARTS TOO SMALL TO BE MARKED SHALL BE TAGGED OR BAGGED.
       - (b) PACKAGE: INTERNAL INDIVIDUAL OR COLLECTIVE PACKAGES AND EXTERNAL PACKAGING SHALL BE MARKED WITH THE FOLLOWING INFORMATION:
         SUPPLIER'S NAME
         NASA PART NUMBER
         DATE CODE, OR DATE OF MANUFACTURE
       - (c) MANUFACTURER'S PART NUMBER MAY APPEAR ON THE PACKAGE.

3. DESIGN:
   - A. ELECTRICAL REQUIREMENTS:
     - (1) CONTACT CURRENT RATING: 3 AMPERES
     - (2) VOLTAGE RATING: 250 VOLTS RMS OR 350 VDC.
     - (3) WITHSTANDING VOLTAGE: 375 V RMS AT 70,000 FT.
     - (4) CONTACT RESISTANCE: 50 MILLIVOLTS MAX AT 3 AMP WHEN MEASURED FROM THE REAR OF THE PIN CONTACT CRIMP BARREL TO THE REAR OF THE SOCKET CONTACT CRIMP BARREL.
   - B. OPERATING TEMPERATURE: +125°C
   - C. COUPLING MECHANISM: CENTER SCREWLOCK
   - D. MATING CONNECTOR: SEE 1010809 OR 1897206.
   - E. MATING TORQUE: 10 IN-LBS MAX WITH CONTACTS
   - F. THREADED INSERT: SHALL BE CONDUCTIVE ANODIZED ALUMINUM ALLOY.
   - G. SHELL MATERIAL: SOLID DIELECTRIC PER MIL-M-14, TYPE MFH OR EQUIVALENT PLUS FLUORO SILICONE RUBBER GROMMET (FRONT AND REAR).



1897182

PROCURE ONLY FROM APPROVED SOURCES LISTED ON ND 1002034 FOR THIS DRAWING.

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY	USED ON

APPLICATION

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING

MATERIAL: SEE REQUIREMENTS
HEAT TREATMENT: NONE
FINAL FINISH: NONE

AC SPARK PLUG DIVISION, GMC
MILWAUKEE, WISCONSIN
DWG NO Contract NAS 9-497

DRAWN J. Wolski DATE 18 DEC 64
CHECKED Kesler 22 DEC 64
APPROVAL 22 DEC 64
APPROVAL J. M. Watson 6-2-65
NASA APPROVAL 6/8/65
MIT APPROVAL 6-8-65

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

CONNECTOR, RECEPTACLE, ELECTRICAL
(ENVIRONMENT RESISTANT, SUB-MINIATURE)

SPECIFICATION CONTROL DRAWING

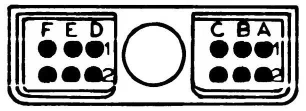
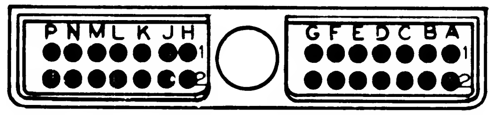
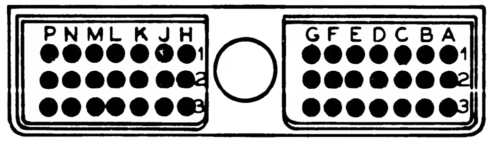
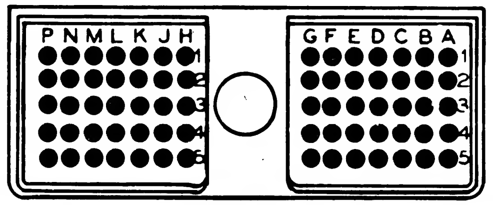
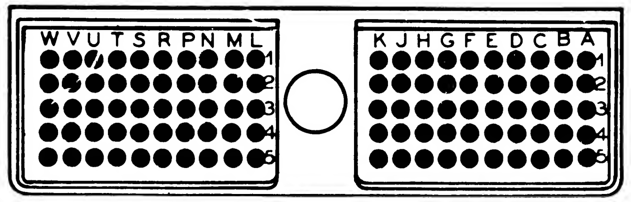
CODE IDENT NO. 99974
SIZE C
NASA DRAWING NO. 1897182
SCALE NONE
WT
SHEET 1 OF 2

NOTICE — WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO

1897182 D

REVISIONS 19956

SYM	DESCRIPTION	DATE	APPROVAL
C	UPGRADED TO CLASS 'A'	12-MAY-65	
D	REVISED PER TDRR 21151	31 JUL 65	SRA RWH

NASA DASH NUMBER	DIMENSIONS		MANUFACTURER'S IDENTIFICATION (REFERENCE)	CONTACT ARRANGEMENT (MATING FACE VIEW) (FOR REF ONLY)	NO. OF CAVITIES
	A	B			
-001	.890 .870	.290 .270	ER51-212P		12
-002	1.530 1.510	.290 .270	ER51-328P		28
-003	1.530 1.510	.370 .350	ER51-442P		42
-004	1.530 1.510	.530 .510	ER51-670P		70
-005	2.010 1.990	.530 .510	ER51-700P	 W V U T S R P N M L K J H G F E D C B A 1 2 3 4 5	100

THE PART NUMBER IS THE DRAWING NUMBER PLUS THE APPLICABLE DASH NUMBER.

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY	USED ON

APPLICATION

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FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING
MATERIAL
HEAT TREATMENT
FINAL FINISH

AC SPARK PLUG DIVISION, GMC
MILWAUKEE, WISCONSIN
DWG NO Contract NAS 9-497

DRAWN J. Wolski DATE 18 DEC 64
CHECKED 22 DEC 64
APPROVAL 22 DEC 64
APPROVAL J. M. Walson 6-2-65

NASA APPROVAL
MIT APPROVAL 6-8-65

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

CONNECTOR, RECEPTACLE, ELECTRICAL
(ENVIRONMENT RESISTANT, SUB-MINIATURE)
SPECIFICATION CONTROL DRAWING

CODE IDENT NO. 99974
SIZE C
NASA DRAWING NO. 1897182
SCALE NONE
WT
SHEET 2 OF 2

1897182

NOTICE — WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINIELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO

1897182 E

REVISIONS TDRR 19956

SYM	DESCRIPTION	DATE	APPROVAL
C	UPGRADED TO CLASS 'A'	12-MAY-65	
(M) D	REVISED PER TDRR 21151	31 JUL 65	SRA RWH
E	REVISED PER TDRR 22695	5 OCT 65	JJJ

REQUIREMENTS:

1. GENERAL:
   - A. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327.
   - B. SUPPLIER SHALL CONFORM TO THE APPLICABLE QUALITY ASSURANCE PROVISIONS SPECIFIED IN MIL-Q-9858.
   - C. CONTACTS SHALL BE PER 1010770 OR 1897190 PINS.

2. INSPECTION AND ACCEPTANCE:
   - A. MECHANICAL REQUIREMENTS:
     - (1) WITHSTANDING VOLTAGE: 1500 V RMS AT SEA LEVEL
     - (2) INSULATION RESISTANCE: 100,000 MEGOHMS AT +25°C AT 500 VDC
       5,000 MEGOHMS AT +125°C AT 500 VDC
     - (3) MARKING:
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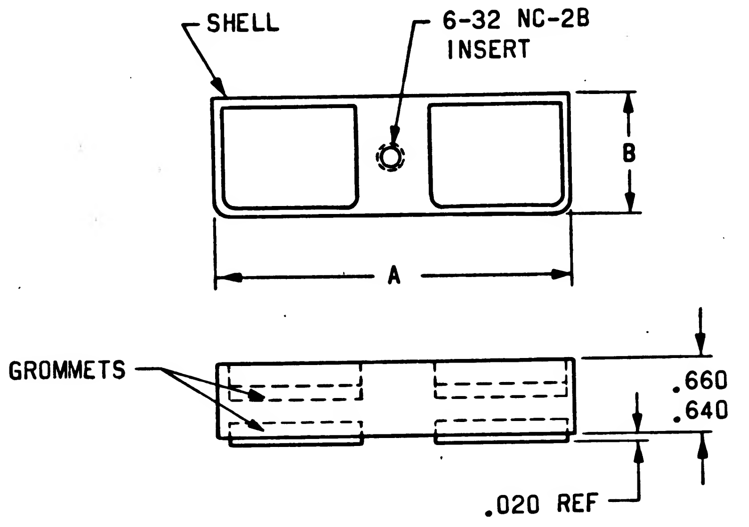
   - B. OPERATING TEMPERATURE: +125°C
   - C. COUPLING MECHANISM: CENTER SCREWLOCK
   - D. MATING CONNECTOR: SEE 1010809 OR 1897206.
   - E. MATING TORQUE: 10 IN-LBS MAX WITH CONTACTS
   - F. THREADED INSERT: SHALL BE ALUMINUM ALLOY, CADMIUM PLATED WITH CLEAR CHROMATE FINISH.
   - G. SHELL MATERIAL: SOLID DIELECTRIC PER MIL-M-14, TYPE MFH OR EQUIVALENT PLUS FLUORO SILICONE RUBBER GROMMET (FRONT AND REAR).



1897182

PROCURE ONLY FROM SOURCES LISTED ON CONTRACTOR'S ACCEPTABLE SUPPLIER'S LIST FOR THIS DRAWING.

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING
MATERIAL SEE REQUIREMENTS
HEAT TREATMENT NONE
FINAL FINISH NONE

AC SPARK PLUG DIVISION, GMC
MILWAUKEE, WISCONSIN
DWG NO Contract NAS 9-497
DRAWN J. Wolski DATE 18 DEC 64
CHECKED Kessler 22 DEC 64
APPROVAL 22 Dec 64
APPROVAL J. M. Watson 6-2-65
NASA APPROVAL 6/4/65
MIT APPROVAL M G Murphy 6-8-65

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

CONNECTOR, RECEPTACLE, ELECTRICAL
(ENVIRONMENT RESISTANT, SUB-MINIATURE)

SPECIFICATION CONTROL DRAWING

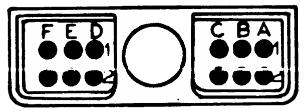
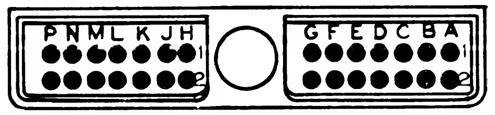
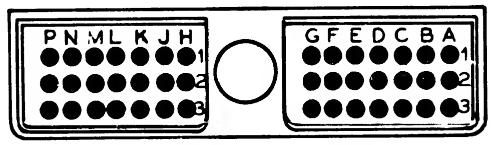
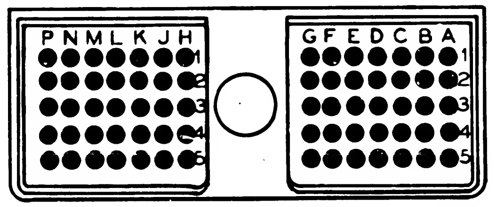
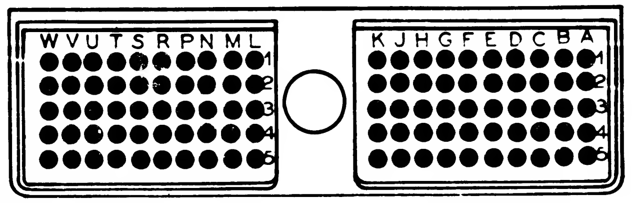
CODE IDENT NO. 99974
SIZE C
NASA DRAWING NO. 1897182
SCALE NONE
WT
SHEET 1 OF 2

NOTICE — WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER, AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO

1897182 E

REVISIONS 19956

SYM	DESCRIPTION	DATE	APPROVAL
C	UPGRADED TO CLASS 'A'	12-MAY-65	
Ⓜ D	REVISED PER TDRR 21151	31 JUL 65	SRA RWH
E	REVISED PER TDRR 22695	5 OCT 65	J J J

NASA DASH NUMBER	DIMENSIONS		~~MANUFACTURER'S IDENTIFICATION (REFERENCE)~~	CONTACT ARRANGEMENT (MATING FACE VIEW) (FOR REF ONLY)	NO. OF CAVITIES
	A	B			
-001	.890 .870	.290 .270	~~ER51-212P~~		12
-002	1.530 1.510	.290 .270	~~ER51-328P~~		28
-003	1.530 1.510	.370 .350	~~ER51-442P~~		42
-004	1.530 1.510	.530 .510	~~ER51-670P~~		70
-005	2.010 1.990	.530 .510	~~ER51-700P~~	 W V U T S R P N M L K J H G F E D C B A 1 2 3 4 5	100

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MATERIAL
HEAT TREATMENT
FINAL FINISH

AC SPARK PLUG DIVISION, GMC
MILWAUKEE, WISCONSIN
DWG NO
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DRAWN J. Wolski DATE 18 DEC 64
CHECKED 22 DEC 64
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APPROVAL J. M. Watson 6-2-65
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MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

CONNECTOR, RECEPTACLE, ELECTRICAL
(ENVIRONMENT RESISTANT, SUB-MINIATURE)
SPECIFICATION CONTROL DRAWING

CODE IDENT NO. 99974
SIZE C
NASA DRAWING NO. 1897182
SCALE NONE
WT
SHEET 2 OF 2

1897182

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1897182 C

REVISIONS TDRR 19956			
SYM	DESCRIPTION	DATE	APPROVAL
C	UPGRADED TO CLASS 'A'	12-MAY-65	

REQUIREMENTS:

1. GENERAL:
   - A. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327.
   - B. SUPPLIER SHALL CONFORM TO THE APPLICABLE QUALITY ASSURANCE PROVISIONS SPECIFIED IN MIL-Q-9858.
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     - (2) INSULATION RESISTANCE: 100,000 MEGOHMS AT +25°C AT 500 VDC
       5,000 MEGOHMS AT +125°C AT 500 VDC
     - (3) MARKING:
       - (a) PIECEMARKING: UNITS SHALL BE MARKED IN ACCORDANCE WITH ND 1002019 WITH THE MANUFACTURER'S NAME AND/OR SYMBOL, NASA PART NUMBER, AND REVISION LETTER, AND DATE CODE OR DATE OF MANUFACTURE. THE MANUFACTURER'S PART NUMBER MAY APPEAR ON THE PART.
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     - (2) VOLTAGE RATING: 250 VOLTS RMS OR 350 VDC.
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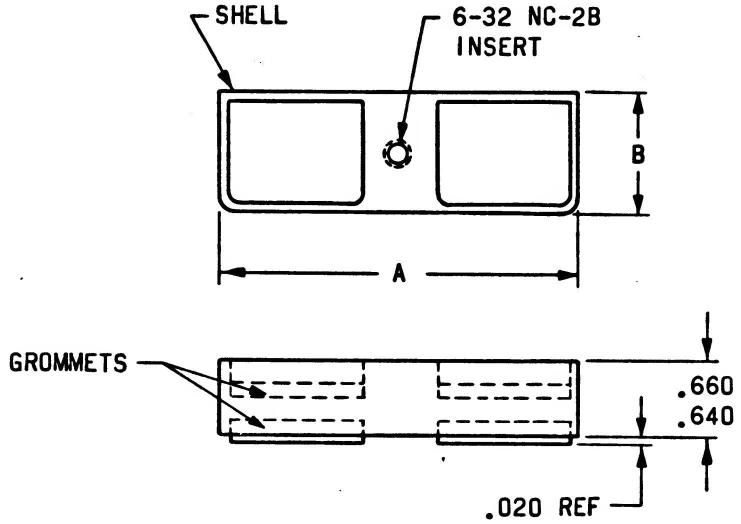
   - B. OPERATING TEMPERATURE: +125°C
   - C. COUPLING MECHANISM: CENTER SCREWLOCK
   - D. MATING CONNECTOR: SEE 1010809 OR 1897266
   - E. MATING TORQUE: 10 IN-LBS MAX WITH CONTACTS
   - F. THREADED INSERT: SHALL BE CONDUCTIVE ANODIZED ALUMINUM ALLOY.
   - G. SHELL MATERIAL: SOLID DIELECTRIC PER MIL-M-14, TYPE MFH OR EQUIVALENT PLUS METHYL-VINYL SILICONE RUBBER GROMMET (FRONT AND REAR).



MASTER

PROCURE ONLY FROM APPROVED SOURCES LISTED ON ND 1002034 FOR THIS DRAWING.

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.
LIST OF MATERIALS			

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING
MATERIAL SEE REQUIREMENTS
HEAT TREATMENT NONE
FINAL FINISH NONE

AC SPARK PLUG DIVISION, GMC
MILWAUKEE, WISCONSIN
DWG. NO. Contract NAS 9-497
DRAWN J. Wolski DATE 18 DEC 64
CHECKED Kasler 22 DEC 64
APPROVAL [illegible] 22 DEC 64
APPROVAL J. M. Watson 6-2-65
NASA APPROVAL [illegible]
MIT APPROVAL W G Mukey 6-8-65

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

CONNECTOR, RECEPTACLE, ELECTRICAL
(ENVIRONMENT RESISTANT, SUB-MINIATURE)

SPECIFICATION CONTROL DRAWING

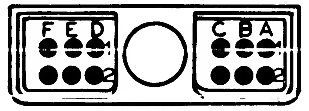
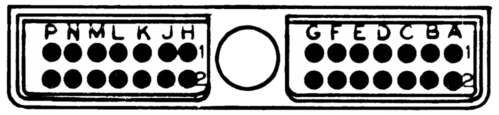
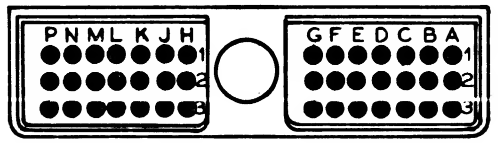
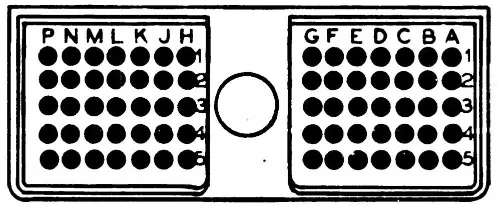
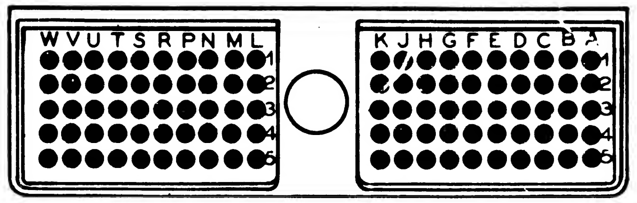
CODE IDENT NO.	SIZE	NASA DRAWING NO.
99974	C	1897182
SCALE NONE	WT	SHEET 1 OF 2

NOTICE — WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER, AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

1897182 C

REVISIONS 19956

SYM	DESCRIPTION	DATE	APPROVAL
C	UPGRADED TO CLASS 'A'	12-MAY-65	A.F.N.

NASA DASH NUMBER	DIMENSIONS		MANUFACTURER'S IDENTIFICATION (REFERENCE)	CONTACT ARRANGEMENT (MATING FACE VIEW) (FOR REF ONLY)	NO. OF CAVITIES
	A	B			
-001	.890 .870	.290 .270	ER51-212P		12
-002	1.530 1.510	.290 .270	ER51-328P		28
-003	1.530 1.510	.370 .350	ER51-442P		42
-004	1.530 1.510	.530 .510	ER51-670P		70
-005	2.010 1.990	.530 .510	ER51-700P	 W V U T S R P N M L K J H G F E D C B A 1 2 3 4 5	100

THE PART NUMBER IS THE DRAWING NUMBER PLUS THE APPLICABLE DASH NUMBER.

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY	USED ON

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING
MATERIAL
HEAT TREATMENT
FINAL FINISH

AC SPARK PLUG DIVISION, GMC
MILWAUKEE, WISCONSIN
DWG. NO. Contract NAS 9-497
DRAWN J. Wolski DATE 18 DEC 64
CHECKED 22 DEC 64
APPROVAL 22 DEC 64
APPROVAL J. M. Watson 6-2-65
NASA APPROVAL
MIT APPROVAL 6-8-65

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

CONNECTOR, RECEPTACLE, ELECTRICAL
(ENVIRONMENT RESISTANT, SUB-MINIATURE)
SPECIFICATION CONTROL DRAWING

CODE IDENT NO. 99974
SIZE C
NASA DRAWING NO. 1897182
SCALE NONE
WT
SHEET 2 OF 2

NOTICE — WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

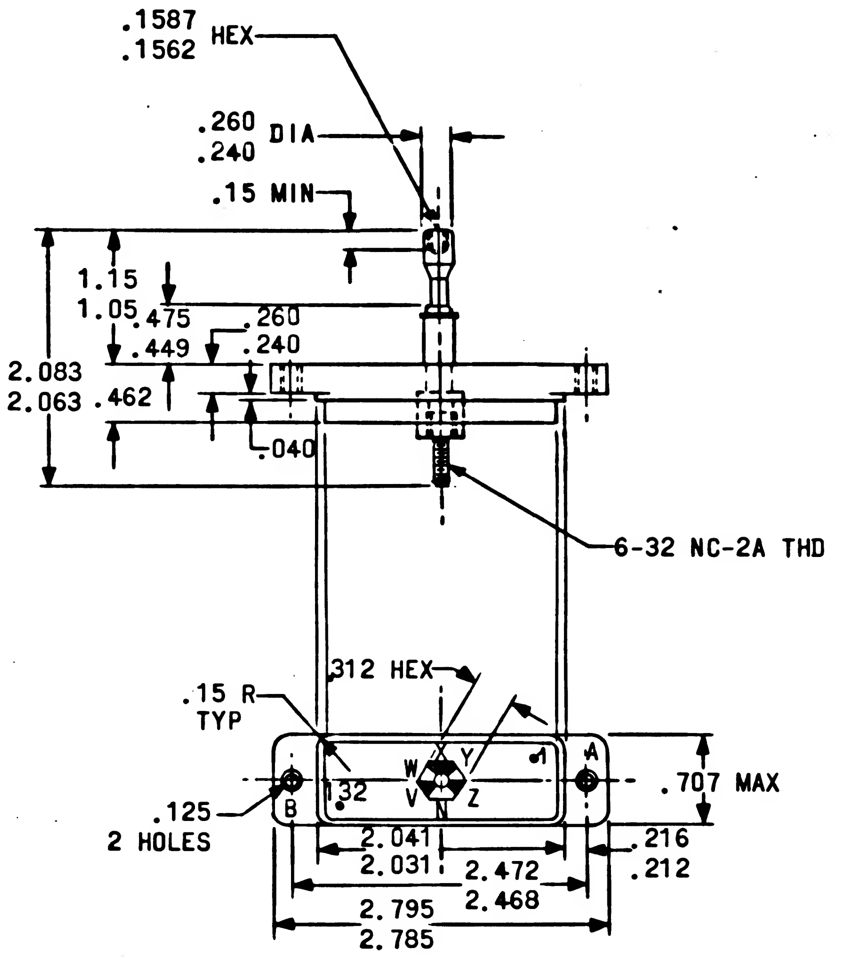
1897186 A

REVISIONS 17840			
SYM	DESCRIPTION	DATE	APPROVAL
A	UPGRADED FOR CLASS A RELEASE PER TDRR 17840	22 MAR 65	JWP

REQUIREMENTS:

1. GENERAL:
   - A. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327.
   - B. SUPPLIER SHALL CONFORM TO THE QUALITY ASSURANCE PROVISIONS SPECIFIED IN ND 1015404, CLASS 3.
   - C. CONNECTOR IS DESIGNED TO USE PIN CONTACTS PER 1010738-5.

2. INSPECTION AND ACCEPTANCE:
   - A. MECHANICAL REQUIREMENTS:
     - (1) MATERIAL:
       - (a) BODY: DIALLYLPHTHALATE PER MIL-M-14, TYPE SDG-F TAN COLOR
       - (b) HARDWARE:
         - POLARIZING BOSS: ALUMINUM ALLOY GRADE 7075T6 PER QQ-A-225/9
         - JACKSCREW AND METAL INSERT: CORROSION RESISTANT STEEL, CLASS 303, OR 303 SE CONDITION A OR B PER MILITARY SPECIFICATION QQ-S-763.
         - SPACER: DIALLYLPHTHALATE PER MIL-M-14 TYPE SDG-F
         - RETAINING RING: MS-16632-28 PER MILITARY SPECIFICATION MIL-R-21248.
     - (2) FINISH:
       - (a) HARDWARE:
         - POLARIZING BOSS: GRAY ANODIZE PER SPECIFICATION MIL-A-8625, CLASS I.
         - JACKSCREW AND METAL INSERT: PASSIVATE PER MIL-S-5002. JACKSCREW IS LUBRICATED.
     - (3) FOR POLARIZATION SEE TABLE I.
     - (4) MARKING:
       - (a) PIECEMARKING: UNITS SHALL BE MARKED IN ACCORDANCE WITH ND 1002019 WITH THE MANUFACTURER'S NAME AND/OR SYMBOL, NASA PART NUMBER, AND REVISION LETTER, LOT OR SERIAL NUMBER TRACEABLE TO THE DATE OF MANUFACTURE. THE MANUFACTURER'S PART NUMBER MAY APPEAR ON THE PART.



PROCURE ONLY FROM APPROVED SOURCES LISTED ON ND 1002034 FOR THIS DRAWING.

A	A
SHEET 1	SHEET 2

REVISION STATUS OF SHEETS

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY	USED ON

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± — DECIMALS ±.010 ±.03 ANGLES ± —
DO NOT SCALE THIS DRAWING

MATERIAL
SEE REQUIREMENTS

HEAT TREATMENT
NONE

FINAL FINISH
SEE REQUIREMENTS

MIT
INSTRUMENTATION LAB
CAMBRIDGE, MASS
DWG NO
Contract NAS 9-497

DRAWN Bender DATE 30-DEC-64
CHECKED M. Hamm 6 JAN 65
APPROVAL 6 JAN 65
APPROVAL J. M Watson 3-25-65

NASA APPROVAL MAR 26 1965
MIT APPROVAL MAR 26 1965

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

CONNECTOR, PLUG, ELECTRICAL-
BODY FOR 132 SOCKET CONTACTS

SPECIFICATION CONTROL DRAWING

CODE IDENT NO.
SIZE C
NASA DRAWING NO. 1897186
SCALE —
WT
SHEET 1 OF 2

1897186

NOTICE — WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER, AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO

REVISIONS	17840		
SYM	DESCRIPTION	DATE	APPROVAL
A	UPGRADED FOR CLASS A RELEASE PER TDRR 17840	22 MAR 65	JWP

REQUIREMENTS: (CONTINUED)

3. DESIGN:

A. ELECTRICAL REQUIREMENTS WITH CONTACTS INSTALLED.

(1) INSULATION RESISTANCE: 2000 MEGOHMS MINIMUM AT 150°F MEASURED BETWEEN ANY TWO ADJACENT CONTACTS AND BETWEEN THE SHELL OR HARDWARE AND ANY ADJACENT CONTACT WHEN TESTED IN ACCORDANCE WITH MIL-STD-202 METHOD 302, CONDITION B.

(2) DIELECTRIC STRENGTH: SEA LEVEL - NO EVIDENCE OF BREAKDOWN OR FLASHOVER WHEN TESTED AT 1500 VRMS. 90,000 TO 130,000 FT. - NO EVIDENCE OF BREAKDOWN OR FLASHOVER WHEN 250 VRMS APPLIED BETWEEN ANY PAIR OF CONTACTS AND BETWEEN THE HARDWARE AND ANY CONTACT WHEN TESTED IN ACCORDANCE WITH MIL-STD-202, METHOD 301.

(3) VOLTAGE RATINGS:

	VOLTS DC	VOLTS AC RMS
SEA LEVEL	490	350
10,000 FT.	390	280
60,000 FT.	140	100

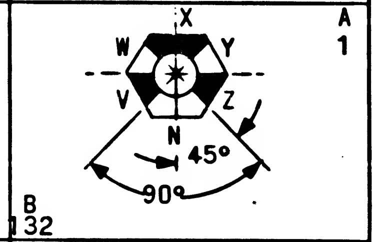
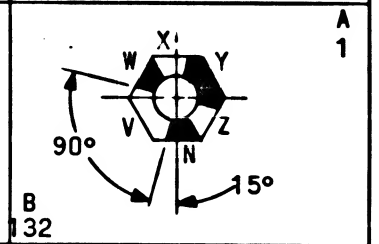
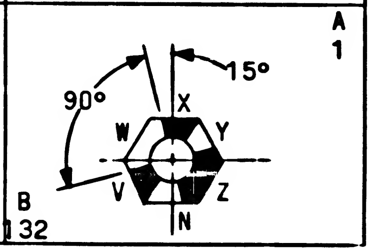
WITHSTANDING VOLTAGE (SEA LEVEL) 1500 VOLTS RMS 60 CPS WITHOUT FLASHOVER.

B. MECHANICAL:

(1) CONTACT RETENTION FORCE: WHEN CONTACTS ARE PROPERLY INSTALLED IN THEIR USING CONNECTOR, THEY ARE CAPABLE OF WITHSTANDING (WITHOUT DAMAGE) A MIN OF 15 LBS. AXIAL LOAD APPLIED IN EITHER DIRECTION AT A RATE OF 1 POUND PER SECOND.

(2) MATES WITH 1897187.

TABLE I

NASA DASH NUMBER	POLARIZING CHART
-1	 X W Y V Z N 45° 90° A 1 B 132
-2	 X W Y V Z N 90° 15° A 1 B 132
-3	 15° 90° X W Y V Z N A 1 B 132

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY | USED ON
APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING
MATERIAL
HEAT TREATMENT
FINAL FINISH

MIT
INSTRUMENTATION LAB
CAMBRIDGE MASS
DWG NO Contract NAS 9-497

DRAWN Bender DATE 30-DEC-64
CHECKED M. Manning 6 JAN 65
APPROVAL
APPROVAL J. M. Watson 3-25-65
NASA APPROVAL MAR 26 1965
MIT APPROVAL MAR 26 1965

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

CONNECTOR, PLUG, ELECTRICAL-
BODY FOR 132 SOCKET CONTACTS

SPECIFICATION CONTROL DRAWING

CODE IDENT NO. | SIZE C | NASA DRAWING NO. 1897186
SCALE | WT | SHEET 2 OF 2

NOTICE — WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

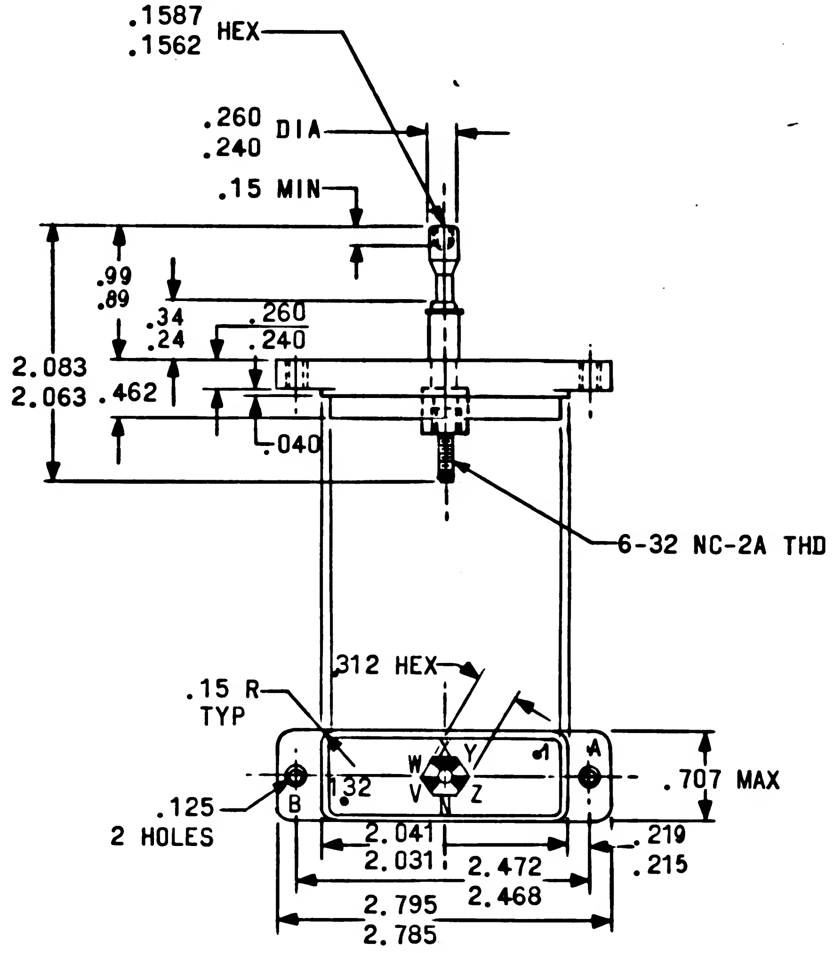
1897186 B

REVISIONS 17840			
SYM	DESCRIPTION	DATE	APPROVAL
A	UPGRADED FOR CLASS A RELEASE PER TDRR 17840	22 MAR 65	JWP
B	REVISED PER TDRR 19961	11 JUN 65	HTO

REQUIREMENTS:

1. GENERAL:
   - A. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327.
   - B. SUPPLIER SHALL CONFORM TO THE QUALITY ASSURANCE PROVISIONS SPECIFIED IN MIL-Q-9858.
   - C. PIN CONTACTS TO BE PROCURED SEPARATELY PER 1010738-5.

2. INSPECTION AND ACCEPTANCE:
   - A. MECHANICAL REQUIREMENTS:
     - (1) MATERIAL:
       - (a) BODY: DIALLYLPHTHALATE PER MIL-M-14, TYPE SDG-F TAN COLOR
       - (b) HARDWARE:
         - POLARIZING BOSS: ALUMINUM ALLOY GRADE 7075T6 PER QQ-A-277-I.
         - JACKSCREW AND METAL INSERT: CORROSION RESISTANT STEEL, CLASS 303, OR 303 SE CONDITION A OR B PER MILITARY SPECIFICATION QQ-S-763.
         - SPACER: DIALLYLPHTHALATE PER MIL-M-14 TYPE SDG-F
         - RETAINING RING: MS-16632-28 PER MILITARY SPECIFICATION MIL-R-21248.
     - (2) FINISH:
       - (a) HARDWARE:
         - POLARIZING BOSS: GRAY ANODIZE PER SPECIFICATION MIL-A-8625, CLASS I.
         - JACKSCREW AND METAL INSERT: PASSIVATE PER MIL-S-5002. JACKSCREW IS LUBRICATED.
     - (3) FOR POLARIZATION SEE TABLE I.
     - (4) MARKING:
       - (a) PIECEMARKING: UNITS SHALL BE MARKED IN ACCORDANCE WITH ND 1002019 WITH THE MANUFACTURER'S NAME AND/OR SYMBOL AND NASA PART NUMBER. THE MANUFACTURER'S PART NUMBER MAY APPEAR ON THE PART.
       - (b) PACKAGE: INTERNAL INDIVIDUAL OR COLLECTIVE PACKAGES AND EXTERNAL PACKAGING SHALL BE MARKED WITH THE FOLLOWING INFORMATION:
         - SUPPLIERS NAME
         - NASA PART NUMBER
         - DATE CODE OR DATE OF MANUFACTURE
         - MANUFACTURER S PART NUMBER (OPTIONAL).



PROCURE ONLY FROM APPROVED SOURCES LISTED ON ND 1002034 FOR THIS DRAWING.

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± — DECIMALS ±.010 ±.03 ANGLES ± —
DO NOT SCALE THIS DRAWING
MATERIAL SEE REQUIREMENTS
HEAT TREATMENT NONE
FINAL FINISH SEE REQUIREMENTS

MIT
INSTRUMENTATION LAB
CAMBRIDGE MASS
DWG NO Contract NAS 9-497
DRAWN Bender DATE 30-DEC-64
CHECKED M. Manning 6 JAN 65
APPROVAL 6 JAN 65
APPROVAL J. M. Watson 3-25-65
NASA APPROVAL MAR 26 1965
MIT APPROVAL MAR 26 1965

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

CONNECTOR, PLUG, ELECTRICAL-
BODY FOR 132 SOCKET CONTACTS
SPECIFICATION CONTROL DRAWING

CODE IDENT NO. 80230 SIZE C NASA DRAWING NO. 1897186
SCALE — WT SHEET 1 OF 2

NOTICE — WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

1897186 B

REVISIONS 17840			
SYM	DESCRIPTION	DATE	APPROVAL
A	UPGRADED FOR CLASS A RELEASE PER TDRR 17840	22 MAR 65	JWP
B	REVISED PER TDRR 19961	11 JUN 65	HTO

Ⓜ

REQUIREMENTS: (CONTINUED)

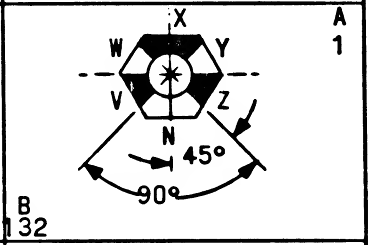
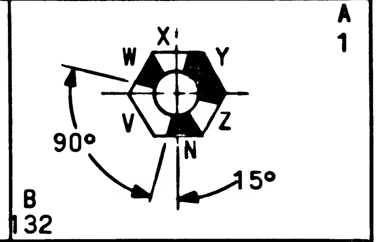
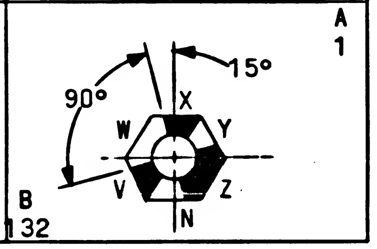
3. DESIGN:
   A. ELECTRICAL REQUIREMENTS WITH CONTACTS INSTALLED.
      (1) INSULATION RESISTANCE: 2000 MEGOHMS MINIMUM AT 150°F MEASURED BETWEEN ANY TWO ADJACENT CONTACTS AND BETWEEN THE SHELL OR HARDWARE AND ANY ADJACENT CONTACT WHEN TESTED IN ACCORDANCE WITH MIL-STD-202 METHOD 302, CONDITION B.
      (2) DIELECTRIC STRENGTH: SEA LEVEL - NO EVIDENCE OF BREAKDOWN OR FLASHOVER WHEN TESTED AT 1500 VRMS. 90,000 TO 130,000 FT. - NO EVIDENCE OF BREAKDOWN OR FLASHOVER WHEN 250 VRMS APPLIED BETWEEN ANY PAIR OF CONTACTS AND BETWEEN THE HARDWARE AND ANY CONTACT WHEN TESTED IN ACCORDANCE WITH MIL-STD-202, METHOD 301.
      (3) VOLTAGE RATINGS:

	VOLTS DC	VOLTS AC RMS
SEA LEVEL	490	350
10,000 FT.	390	280
60,000 FT.	140	100

WITHSTANDING VOLTAGE (SEA LEVEL) 1500 VOLTS RMS 60 CPS WITHOUT FLASHOVER.

   B. MECHANICAL:
      (1) CONTACT RETENTION FORCE: WHEN CONTACTS ARE PROPERLY INSTALLED IN THEIR USING CONNECTOR, THEY ARE CAPABLE OF WITHSTANDING (WITHOUT DAMAGE) A MIN OF 15 LBS. AXIAL LOAD APPLIED IN EITHER DIRECTION AT A RATE OF 1 POUND PER SECOND.
      (2) MATES WITH 1897187.

TABLE I

NASA DASH NUMBER	POLARIZING CHART
-1	 A 1 X W Y V Z N 45° 90° B 132
-2	 A 1 X W Y V Z N 90° 15° B 132
-3	 A 1 15° 90° X W Y V Z N B 132

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING
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HEAT TREATMENT
FINAL FINISH

MIT
INSTRUMENTATION LAB
CAMBRIDGE MASS
DWG NO Contract NAS 9-497

DRAWN Bender DATE 30-DEC-64
CHECKED M. Manning 6 JAN 65
APPROVAL [illegible] 6 JAN 65
APPROVAL J. M. Watson 3-25-65
NASA APPROVAL MAR 26 1965
MIT APPROVAL MAR 26 1965

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

CONNECTOR, PLUG, ELECTRICAL-
BODY FOR 132 SOCKET CONTACTS

SPECIFICATION CONTROL DRAWING

CODE IDENT NO. 80230
SIZE C
NASA DRAWING NO. 1897186
SCALE
WT
SHEET 2 OF 2

1897186

NOTICE — WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER, AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

1897187 A

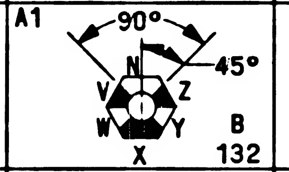
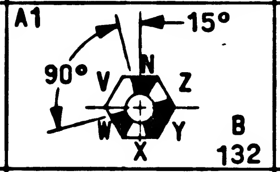
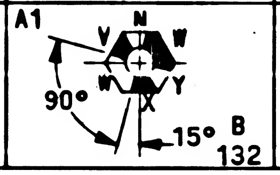
REVISIONS 17840			
SYM	DESCRIPTION	DATE	APPROVAL
A	UPGRADED FOR CLASS A RELEASE PER TDRR 17840	22 MAR 65	JWP

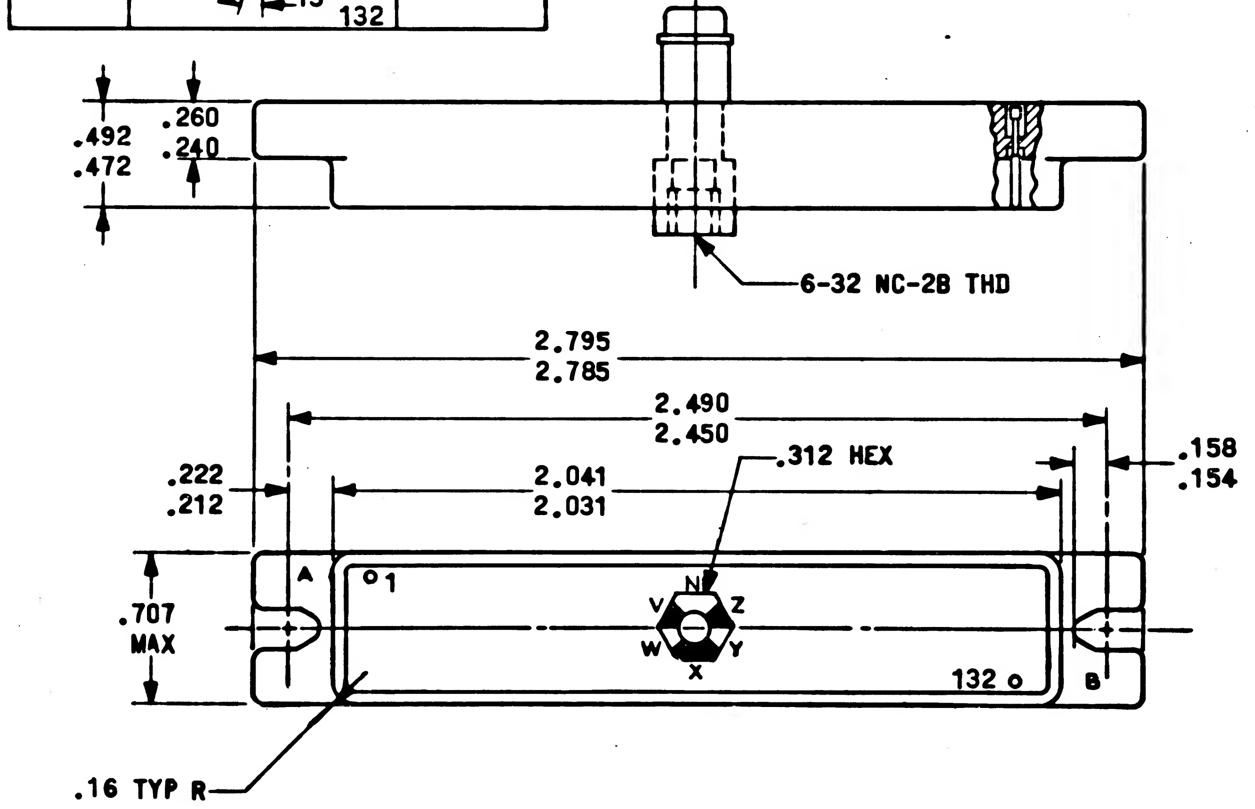
REQUIREMENTS:

1. GENERAL:
   - A. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327.
   - B. SUPPLIER SHALL CONFORM TO THE QUALITY ASSURANCE PROVISIONS SPECIFIED IN ND 1015404, CLASS 3.
   - C. PIN CONTACTS ARE TO BE PROCURED SEPARATELY PER 1010738-5.

2. INSPECTION AND ACCEPTANCE:
   - A. MECHANICAL REQUIREMENTS:
     - (1) MATERIAL:
       - (a) BODY: DIALLYLPHTHALATE PER MIL-M-14, TYPE SDG-F (TAN COLOR)
       - (b) HARDWARE:
         POLARIZING BOSS: ALUMINUM ALLOY GRADE 7075T6 PER QQ-A-225/9.
         METAL INSERT: CORROSION RESISTANT STEEL, CLASS 303, OR 303 S_e, CONDITION A OR B PER QQ-S-763.
         SPACER: DIALLYLPHTHALATE PER MIL-M-14, TYPE SDG-F.
     - (2) FINISH:
       - (a) HARDWARE:
         POLARIZING BOSS: GRAY ANODIZE PER MIL-A-8625, TYPE I.
         METAL INSERT: PASSIVATE PER MIL-S-5002.
     - (3) FOR POLARIZATION SEE TABLE I.
     - (4) MARKING:
       - (a) PIECEMARKING: UNITS SHALL BE MARKED IN ACCORDANCE WITH ND 1002019 WITH THE MANUFACTURER'S NAME AND/OR SYMBOL, NASA PART NUMBER, AND REVISION LETTER AND LOT OR SERIAL NUMBER TRACEABLE TO DATE OF MANUFACTURE. THE MANUFACTURER'S PART NUMBER MAY APPEAR ON THE PART OR PACKAGE.

TABLE I

NASA DASH NUMBER	POLARIZATION CHART	NO. OF CONTACTS
-1		132
-2		132
-3		132



1897187

A	A
SHEET 1	SHEET 2

REVISION STATUS OF SHEETS

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± — DECIMALS ±.010 ±.03 ANGLES ± —
DO NOT SCALE THIS DRAWING

MATERIAL
SEE REQUIREMENTS

HEAT TREATMENT
NONE

FINAL FINISH
SEE REQUIREMENTS

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

MIT
INSTRUMENTATION LAB
CAMBRIDGE, MASS
DWG NO
Contract NAS 9-497

DRAWN W. Bender DATE 30-NOV-64
CHECKED W. Diehl 5 JAN '65
APPROVAL 5 JAN 65
APPROVAL J. M. Watson 3-26-65

NASA APPROVAL MAR 26 1965
MIT APPROVAL MAR 26 1965

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

CONNECTOR, RECEPTACLE, ELECTRICAL-
BODY FOR NO. 132 PIN CONTACTS

SPECIFICATION CONTROL DRAWING

CODE IDENT NO.
SIZE C
NASA DRAWING NO. 1897187
SCALE —
WT
SHEET 1 OF 2

PROCURE ONLY FROM APPROVED SOURCES LISTED ON ND 1002034 FOR THIS DRAWING.

NOTICE — WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER, AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REVISIONS	17840		
SYM	DESCRIPTION	DATE	APPROVAL
A	UPGRADED FOR CLASS A RELEASE PER TDRR 17840	22 MAR 65	JNP

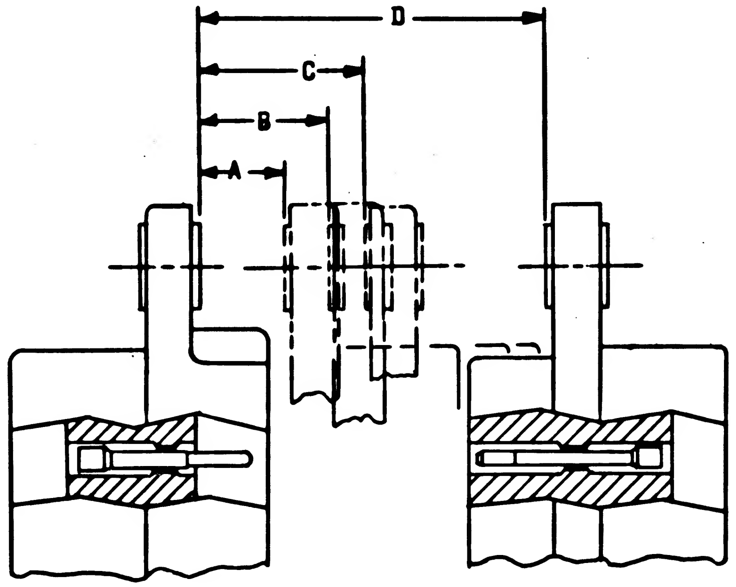
REQUIREMENTS: (CONTINUED)

3. DESIGN:
   - A. ELECTRICAL REQUIREMENTS WITH CONTACTS INSTALLED.
     - (1) INSULATION RESISTANCE: 2000 MEGOHMS MINIMUM (500 VDC) AT 150°F MEASURED BETWEEN ANY TWO ADJACENT CONTACTS AND BETWEEN THE SHELL OR HARDWARE AND ANY ADJACENT CONTACT WHEN TESTED IN ACCORDANCE WITH MIL-STD-202 METHOD 302, CONDITION B.
     - (2) DIELECTRIC STRENGTH: SEA LEVEL - NO EVIDENCE OF BREAKDOWN OR FLASHOVER WHEN TESTED AT 1500 VRMS. 90,000 TO 130,000 FT. - NO EVIDENCE OF BREAKDOWN OR FLASHOVER WHEN 250 VRMS APPLIED BETWEEN ANY PAIR OF CONTACTS AND BETWEEN THE HARDWARE AND ANY CONTACT WHEN TESTED IN ACCORDANCE WITH MIL-STD-202, METHOD 301.
     - (3) VOLTAGE RATINGS:

	VOLTS DC	VOLTS AC RMS
SEA LEVEL	490	350
10,000 FT.	390	280
60,000 FT.	140	100

   - B. MECHANICAL:
     - (1) CONTACT RETENTION FORCE: WHEN CONTACTS ARE PROPERLY INSTALLED IN THEIR USING CONNECTOR, THEY ARE CAPABLE OF WITHSTANDING (WITHOUT DAMAGE) A MIN OF 15 LBS. AXIAL LOAD APPLIED IN EITHER DIRECTION AFTER NOT LESS THAN 10 INSERTIONS AND WITHDRAWALS.

	JACKSCREW	RACK & PANEL HARDWARE
A (FULLY ENGAGED)	.216±.012	
B (PIN DISENGAGED)	.338±.038	
C (HEX DISENGAGED)	.482±.012	
D (FULLY DISENGAGED)	1.029±.036	.790±.038



FOR ENG REF ONLY

NOTES:
1. POLARIZING BOSS SHOWN IN "N" POSITION.
2. SHADED AREAS INDICATE HIGH PORTIONS OF POLARIZING DEVICE.
3. LARGE NOTCH IS ADJACENT TO POLARIZATION POSITION LETTER REQUESTED.
4. MATES WITH 1897186.

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING
MATERIAL
HEAT TREATMENT
FINAL FINISH

MIT
INSTRUMENTATION LAB
CAMBRIDGE MASS
DWG NO Contract NAS 9-497
DRAWN Bender DATE 30-NOV-64
CHECKED W. Biehl 6 Jan. 65
APPROVAL 5 JAN 65
APPROVAL J. M. Watson 3-25-65
NASA APPROVAL MAR 26 1965
MIT APPROVAL MAR 26 1965

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

CONNECTOR, RECEPTACLE, ELECTRICAL-
BODY FOR NO. 132 PIN CONTACTS

SPECIFICATION CONTROL DRAWING

CODE IDENT NO.	SIZE	NASA DRAWING NO.
	C	1897187
SCALE	WT	SHEET 2 OF 2

NOTICE — WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO

1897187 B

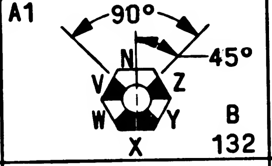
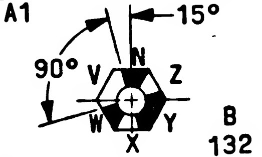
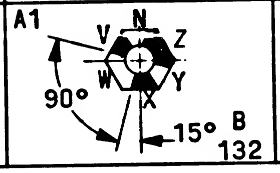
REVISIONS 17840			
SYM	DESCRIPTION	DATE	APPROVAL
A	UPGRADED FOR CLASS A RELEASE PER TDRR17840	22 MAR 65	JWP
B.	REVISED PER TDRR 21947	31 AUG 65	

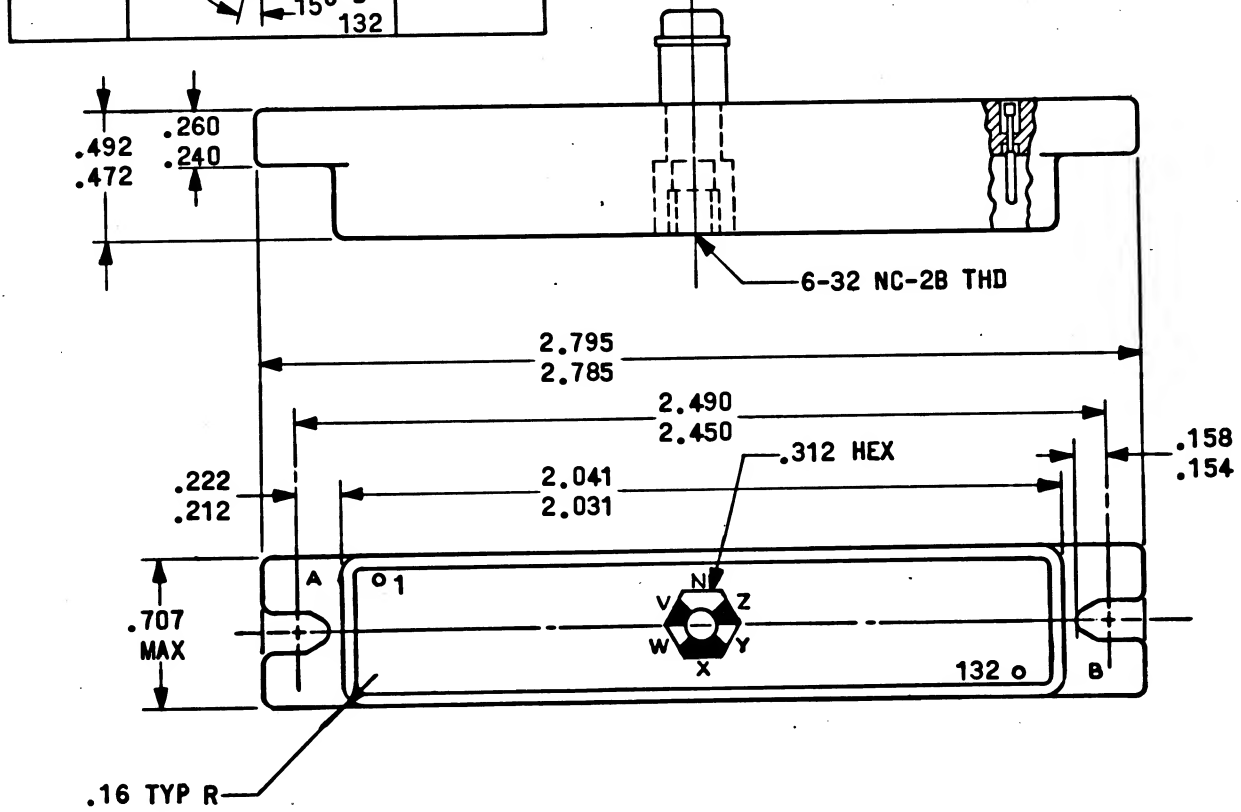
REQUIREMENTS:

1. GENERAL:
   - A. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327.
   - B. SUPPLIER SHALL CONFORM TO THE QUALITY ASSURANCE PROVISIONS SPECIFIED IN MIL-Q-9858.
   - C. PIN CONTACTS ARE TO BE PROCURED SEPARATELY PER 1010738-5.

2. INSPECTION AND ACCEPTANCE:
   - A. MECHANICAL REQUIREMENTS:
     - (1) MATERIAL:
       - (a) BODY: DIALLYLPHTHALATE PER MIL-M-14, TYPE SDG-F (TAN COLOR)
       - (b) HARDWARE:
         - POLARIZING BOSS: ALUMINUM ALLOY GRADE 7075T6 PER QQ-A-227-1.
         - METAL INSERT: CORROSION RESISTANT STEEL, CLASS 303, OR 303 S_e, CONDITION A OR B PER QQ-S-763.
         - SPACER: DIALLYLPHTHALATE PER MIL-M-14, TYPE SDG-F.
     - (2) FINISH:
       - (a) HARDWARE:
         - POLARIZING BOSS: GRAY ANODIZE PER MIL-A-8625, TYPE I.
         - METAL INSERT: PASSIVATE PER MIL-S-5002.
     - (3) FOR POLARIZATION SEE TABLE I.
     - (4) MARKING:
       - (a) PIECEMARKING: UNITS SHALL BE MARKED IN ACCORDANCE WITH ND 1002019 WITH THE MANUFACTURER'S NAME AND/OR SYMBOL, AND NASA PART NUMBER. THE MANUFACTURER'S PART NUMBER MAY APPEAR ON THE PART.
       - (b) PACKAGE: INTERNAL INDIVIDUAL OR COLLECTIVE PACKAGES AND EXTERNAL PACKAGING SHALL BE MARKED WITH THE FOLLOWING INFORMATION:
         - SUPPLIER'S NAME
         - NASA PART NUMBER
         - DATE CODE OR DATE OF MANUFACTURE
         - MANUFACTURER'S PART NUMBER (OPTIONAL)

TABLE I

NASA DASH NUMBER	POLARIZATION CHART	NO. OF CONTACTS
-1	 A1 90° 45° N V Z W Y X B 132	132
-2	 A1 15° 90° V N Z W Y X B 132	132
-3	 A1 V N Z W Y X 90° 15° B 132	132



1897187

PROCURE ONLY FROM APPROVED SOURCES LISTED ON CONTRACTORS ACCEPTABLE SUPPLIERS LIST.

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

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TOLERANCES ON
FRACTIONS ± — DECIMALS ± .010 ± .03 ANGLES ± —
DO NOT SCALE THIS DRAWING

MATERIAL: SEE REQUIREMENTS
HEAT TREATMENT: NONE
FINAL FINISH: SEE REQUIREMENTS

MIT INSTRUMENTATION LAB
CAMBRIDGE, MASS
DWG. NO. Contract NAS 9-497
DRAWN Bender DATE 30-NOV-64
CHECKED W. Diehl 5 JAN '65
APPROVAL 5 JAN 65
APPROVAL J. M. Watson 3-26-65
NASA APPROVAL MAR 26 1965
MAR 26 1965
MIT APPROVAL

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

CONNECTOR, RECEPTACLE, ELECTRICAL-BODY FOR NO. 132 PIN CONTACTS

SPECIFICATION CONTROL DRAWING

CODE IDENT NO. —
SIZE C
NASA DRAWING NO. 1897187
SCALE —
WT
SHEET 1 OF 2

1897187 B

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REVISIONS 17840

SYM	DESCRIPTION	DATE	APPROVAL
A	UPGRADED FOR CLASS A RELEASE PER TDRR 17840	22 MAR 65	JWP
B	REVISION STATUS CHANGED	3/AUG 65	K

(M)

REQUIREMENTS: (CONTINUED)

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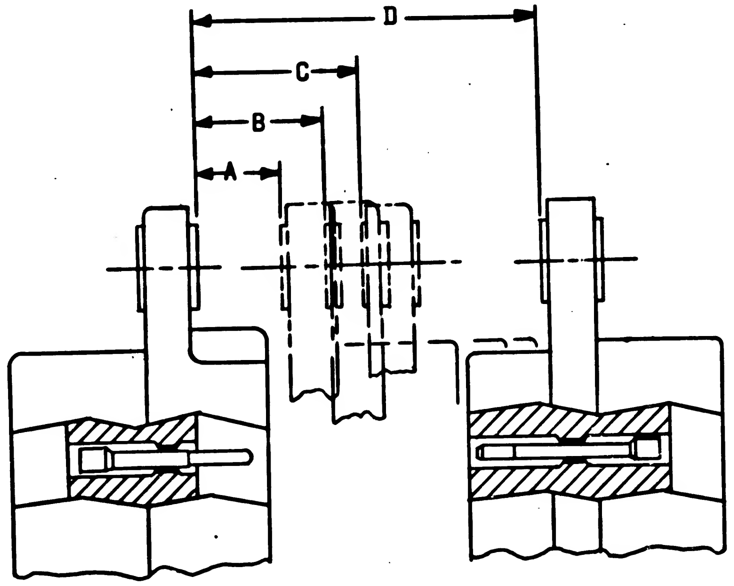

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LIST OF MATERIALS

NEXT ASSY	USED ON

APPLICATION

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M I T
INSTRUMENTATION LAB
CAMBRIDGE, MASS
DWG NO Contract NAS 9-497
DRAWN Bender DATE 30-NOV-64
CHECKED W. Diehl 5 JAN, 65
APPROVAL 5 JAN 65
APPROVAL J. M. Watson 3-25-65
NASA APPROVAL MAR 29 1965
MIT APPROVAL MAR 26 1965

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

CONNECTOR, RECEPTACLE, ELECTRICAL-
BODY FOR NO. 132 PIN CONTACTS

SPECIFICATION CONTROL DRAWING

CODE IDENT NO.
SIZE C
NASA DRAWING NO. 1897187
SCALE
WT
SHEET 2 OF 2

1897187